H 34/4

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

NEWARK PUBLIC LIBRARY

NOV 12 1982

U. S. GOVT. PUBS.
DEPOSITORY 376

Memorandum

Date August 1982

From Health Services Officer
Division of Health Education

Subject Health Education in Federal Health Care Facilities:
U.S. Public Health Service; Veterans Administration;
U.S. Navy and U.S. Air Force

To Colleagues in Health Promotion and Education

The attached report, Health Education in Federal Health Care Facilities: U.S. Public Health Service; Veterans Administration; U.S. Navy and U.S. Air Force, is one of a series of health-care-setting documents prepared under contract number 200-79-0916 between the Center for Health Promotion and Education of the Centers for Disease Control and the Center for Health Promotion of the American Hospital Association.

Inquiries related to this report should be addressed to this office. Write or call:

Centers for Disease Control
Center for Health Promotion and Education
Division of Health Education
Attn: Roy L. Davis
Atlanta, Georgia 30333
(404) 329-3115
FTS 236-3115

Roy L Davis

Roy L. Davis

Attachment

READEX FICHE

HE 20.7002:

Reports emanating from contract 200-79-0916 are listed below:

- American Hospital Association/Bureau of Health Education Health Education Project - Reimbursement Forum Proceedings, October 25, 1979

- Financing for Health Education Services in the United States - October 1980

- Annual Report: Health Education in Primary Care Facilities - August 9, 1979, to November 8, 1980

- Executive Summary - Financing for Health Education Services in the United States -- Providers, February 1981

- Executive Summary - Financing for Health Education Services in the United States -- Third Party Payers, February 1981

- Statements About the Health Education Roles and Responsibilities of Selected Health Care Providers, September 1981

- Consumer Involvement in the College Health Service, September 1981 (Also: Zapka JG, Dorfman SL. Consumer participation: case study of the college health services setting. Journal of the American College Health Association 1982; 30(4):197-203.)

- Blue Cross/Blue Shield Plan Support for Health Education Services: A Discussion of Issues, May 1982

- Foundation Funding for Health Education 1972-1980, May 1982

- Health Education in Health Departments, May 1982

- Patient Education in Hospital Sponsored Home Health Care Programs, May 1982

- Patient Education in Hospital Sponsored Ambulatory Surgery Programs, May 1982

- Health Education in Federal Health Care Facilities: U.S. Public Health Service; Veterans Administration; U.S. Navy and U.S. Air Force, August 1982

- Health Education in College Health Services, August 1982

- Culture-Bound and Sensory Barriers to Communication With Patients: Strategies and Resources for Health Education, August 1982

- Multi-Institutional Arrangements: A Review of the Literature, August 1982

- Patient Education in Hospital Emergency Departments, August 1982

Health Education in Federal Health Care Facilities: U.S. Public Health Service; Veterans Administration; U.S. Navy and U.S. Air Force

AHA/CDC Health Education Project*
Center for Health Promotion
American Hospital Association
October 1981

*This project is funded by the U.S. Department of Health and Human Services, Centers for Disease Control (CDC), Center for Health Promotion and Education, Community Program Development Division, Atlanta, GA, under contract number 200-79-0916 with the American Hospital Association, Chicago, IL

CONTENT

	Page
FORWARD	v
ACKNOWLEDGEMENTS	vii
METHODOLOGY	viii
U.S. PUBLIC HEALTH SERVICE	
Overview	1
Case Studies	
. USPHS Outpatient Clinic/San Pedro, CA	11
. USPHS Outpatient Clinic/Tampa, FL	28
. USPHS Outpatient Clinic/Chicago, IL	22
. USPHS Outpatient Clinic/Old San Juan, PR	25
. USPHS Outpatient Clinic/Nassau Bay, TX	31
VETERANS ADMINISTRATION	
Overview	34
Case Studies	
. VA Cooperative Health Education Program, Boise, ID	43
. VA Medical District 14, MI	47
. VA Medical Center, Buffalo, NY	67
U.S. NAVY	
Overview	80
Case Studies	
. NRMC/Long Beach, CA	89
. NRMC/Jacksonville, FL	94
. Naval Aerospace RMC/Pensacola, FL	98
. NRMC/Memphis, TN	100
U.S. AIR FORCE FACILITIES	
Overview	103
Case Studies	
. USAF Hospital Fairchild, Fairchild, WA	109
. USAF Hospital Plattsburgh, Plattsburgh, NY	112
. USAF Hospital Pease, Portsmouth, NH	115
. USAF Hospital Mather, Mather, CA	122

Foreword

This resource paper is one of a series of health-care-setting documents prepared as part of contract #200-79-0916 between the Center for Health Promotion and Education, Centers for Disease Control (DHHS) and the American Hospital Association's Center for Health Promotion. A major objective of the first two years of this contract was to describe the current status of patient education in outpatient settings and health-care-setting-based community health education. The following specific types of settings have been studied: hospitals (urban, rural, multi-institutional); hospital-sponsored outpatient clinics; hospital-sponsored emergency departments; hospital-sponsored home health care programs; health departments; health maintenance organizations; college health services; group practices; community health centers; the U.S. Public Health Service; Veterans Administration facilities; and U.S. Navy and U.S. Air Force facilities.

In order to collect useful information about patient or community health education activities in these settings, as well as to use limited resources carefully, project staff chose to begin with the literature review process. For some settings, in particular the hospital setting, patient and community health education were addressed separately because they seem to emanate from different parts of the institution. For most other settings, health education activities, or a combination of patient and community education, were studied. A frequently asked question has been "How did you define patient and community education?" For the most part, we did not choose definitions, preferring to look at how the different settings used the terms. Patient and community education were distinguished by their concentration on different major target populations: patient education was directed to people in the role of patients, while community education was directed to people when they were <u>not</u> in the role of patients.

In order to organize the information in a comparable way across settings, the following variables were used to guide the development of the review: unique aspects of the setting; positive and negative factors influencing provision of health education; administrative support for health education; health education management structures; educational programming for specific target populations; evaluation activities; financing/budget strategies; staffing; consumer involvement; and relationships with community organizations. A particular emphasis was placed on understanding the management variables unique to each setting that would impact on the development of health education activities.

However, as we began to organize the reviews, it became clear that for some settings it would be difficult to use this set of variables. For example, in hospital-sponsored home care programs, patient education was so integrated into the delivery of care that it was difficult to match information found in the literature with such variables as health education management structures, financing/budget, and so on. For this reason, papers on settings such as the home care setting focus more on the integration of health education into patient flow.

The specific process used to develop each review will be described in a separate methodology section in each paper. In general, computer data base searches provided the initial basis for a literature review. Each draft document was then sent out for review by project liaison representatives and appropriate administrators and health education practitioners. Based on comments from these reviewers, additional literature was added, in many cases from reports, conference proceedings, or unpublished material that was difficult to find through data base searching. Also, through the review process, gaps in the literature were identified that were used in developing criteria for the selection of case study examples.

Several settings scheduled for literature reviews required a somewhat different approach. Project liaison representatives from the federal facilities--USPHS, VA, U.S. Navy, and U.S. Air Force--assisted in the development of papers with a national, central office focus. Reports and documents generated by staff of these facilities were summarized to provide an overview of the health education services provided. At the same time, because there have been such major changes during the past decade in community health centers, it was suggested that a literature review would not reflect current trends in health education activities. Therefore, project staff worked with the National Association of Community Health Centers to collect information on 25 community health centers serving urban, rural, or migrant populations.

Project staff used the first draft health-care-setting documents as a basis for selecting program examples, descriptions of which would complement the literature review. Two to twelve institutions representing each health care setting provided information about their specific patient and/or community education programs. This information was developed into case studies. The major objective of the case study preparation has been to present examples of how different settings are solving health education problems now. These program examples were not selected as models that should necessarily be copied by others. In fact, some institutions were chosen because they were in early, developmental stages of programming. Rather, each of the more than 60 examples provided raises issues and problems in programming that are likely to be faced by other health-care-setting staff interested in the development of effective health education activities.

Acknowledgements

The preparation of this resource document was made possible by funds from the Center for Health Promotion and Education, Centers for Disease Control (CDC) (DHHS) under contract #200-79-0916. The project officers for this contract are Roy L. Davis and Beth R. Layson, Community Program Development Division, Center for Health Promotion and Education, CDC. Project staff from the American Hospital Association's Center for Health Promotion are: Elizabeth Lee, project director; Barbara Giloth, project co-director, Mary Longe, project co-director; Bonita Kelly, project assistant; and Twyjean Owens, project secretary. Reports and documents generated by staff of the federal government facilities were summarized by Donald F. Phillips, project consultant, to provide an overview and case studies of the health education services offered by the U.S. Public Health Service, the Veterans Administration, the U.S. Navy and the U.S. Air Force.

Special thanks are extended to the following project liaisons for providing information on each of their respective federal agency's educational activities and for the additional time they gave to follow up reviews and interviews: Barbara K. Redman, Former National Coordinator for Patient Health Education, Veterans Administration Central Office, Washington D.C.; Barbara J. Hebert, Patient Health Education Coordinator, Mid-Atlantic, VA Regional Medical Education Center, Brecksville, OH; Nan Stout, Acting National Coordinator for Patient Health Education and, Patient Health Education Coordinator, VA Medical District 14, Ann Arbor, MI; and Wendy Carter, Reader Services Specialist, VA Central Office Library, Washington, D.C.; Anna W. Skiff, Health Education Staff Chief, Public Health Service Hospital, Staten Island, NY; Lt. Col. W. Jean Hilty, Health Education Officer Health Education Program Central Office, U.S. Department of the Air Force, Sheppard Air Force Base, Texas; and Lt. Charles Cole, Director, Health Education Division, Health Sciences Education and Training Command, National Naval Medical Center, Bethesda, MD.

Thanks also are extended to the following persons for their contributions of information used in the case studies: Kathleen Linnell, Assistant Executive Director, VA Cooperative Health Education Program, Boise, ID; Ann Windle, Patient Health Education Coordinator, VA Cooperative Health Education Program, Boise, ID. Barbara L. Kirsner, Patient Health Education Coordinator, VA Medical Center, Buffalo, NY; Eloise Bechinor and Michele St. Jean, USPHS Outpatient Clinic, San Pedro, CA; Herbert Heib, Director, USPHS Outpatient Clinic, Tampa, FL; Patricia McAdoo and Ira Rosenberg, Director, USPHS Outpatient Clinic, Chicago, IL; David Schultz, Director, USPHS Outpatient Clinic, Houston, Texas; Lt. Colonel Ruth Fender, Pease Air Force Base, NH; Major Mary Cox, Mather Air Force Base, CA; Major Harry Wesche, Fairchild Air Force Base, WA; Lt. Colonel Donna Cunningham, Plattsburgh Air Force Base, NY; Lt. Commander Carol Carney, Naval Regional Medical Center, Long Beach, CA; Commander Bonnie Leadford, Naval Aerospace Regional Medical Center, Pensacola, FL; Commander Linda Pollock, Naval Regional Medical Center, Jacksonville, FL; and Commander Phyllis Fleury, Naval Regional Medical Center, Memphis, TN.

Methodology
Overview of Federal Agency Health Education Activities

Project liaison representatives from the federal facilities --- USPHS, VA, U.S. Navy, and U.S. Air Force --- assisted in the development of the overviews which have a national, central office focus. Reports and documents generated by staff from these federal organizations were integrated and summarized by AHA Project staff to develop an overview of the health education services provided by these organizations. Draft summaries of these overviews were sent to the liaison representatives for review. Subsequent changes based on their comments were incorporated into the overview documents before final editing.

Case Studies. Based on the suggestions of the liaison representatives, specific federal institutions were selected to show how health education programs and activities are being planned and conducted at the local level. Basic program questionnaires designed by AHA Project staff were sent to individuals responsible for health education activities at each of these institutions. In addition to the information obtained from the questionnaires, relevant reports, handouts, and other materials descriptive of the particular setting and its educational programs also were requested. After reviewing this information, Project staff conducted telephone interviews with a contact person at each institution and prepared draft case study reports. These were sent to the respective contact person for review and expansion. Their comments were incorporated into the resource document before final editing.

OVERVIEW

Office of Ambulatory Care
Bureau of Medical Services
Public Health Service

Health Education Programs

Organizational overview, purpose and mission

The Bureau of Medical Services within the Health Services Administration of the Public Health Service provides direct medical care to federal beneficiaries. The Bureau includes a system of 8 general medical and surgical (GMS) hospitals; the National Leprosarium at Carville, LA; 27 freestanding outpatient clinics, 25 of which report to GMS hospitals and 2 of which report directly to Bureau headquarters in West Hyattsville, MD; and a network of nearly 300 physicians and dentists under contract. As a component of the Federal government, the Bureau must operate within the framework of Administration and Congressional funding decisions.*

The purpose of the hospital and clinic system is:

- To provide comprehensive health care to federal beneficiaries, which include American seamen, active and retired members of the U.S. Coast Guard, the U.S. Public Health Service, the National Oceanic and Atmospheric Administration, and their dependents.
- To participate in community's integrated response to health care needs.
- To serve as a Federal health resource capable of mobilizing to meet worldwide health care needs.
- To provide education and training for professional and supportive health care personnel.

This report focuses on the activities of the 27 freestanding clinics, which deliver primary care to statutory beneficiaries and, where appropriate, to members of nearby, underserved populations. The clinics contract with other

*This report and the case studies that follow were prepared prior to the enactment of legislation that closed all U.S.P.H.S. freestanding outpatient clinics on September 30, 1981.

providers for primary services not available on-site and for secondary care services as necessary. They are staffed and equipped to provide a wide range of preventive, diagnostic, therapeutic, and rehabilitative services. All the clinics are headed by an administrator and direct care is provided by physicians and nurses. In most cases physical therapists, pharmacists, nutritionists, and dentists are employed; laboratory, social work, and x-ray services may also be available.

Administrative support for health education

Support for health education has been shown by the designation of a position, the Health Education Staff Chief, at the Division headquarters level. The person in this position represents the Bureau on numerous national advisory committees and has been instrumental in implementing patient education studies, such as those contained in the publication, Ambulatory Care Patient Learning Needs Assessment, U.S. Public Health Service Hospital, Staten Island, NY, June 1979.

Health education activities at the national level

The Bureau has stressed the importance of health education through special sessions at the 1976-79 annual meetings of facility directors. It has made video equipment available to the clinics and, in 1978, it established an Education and Resource Center at the Carville (LA) Hospital, which supplies a variety of teaching materials to the PHS hospitals and clinics. In 1979, the Bureau supported a study of comprehension levels of patients at one facility, the findings of which were disseminated throughout the system; in February 1980, a workshop was convened to prepare educational staff to correct deficiencies found in the study.

During 1980-81, the Division plans to develop comprehensive professional standards for health education services in its facilities as part of its effort to produce a revised operations manual. These standards should serve as a basic reference point and guide for patient education program planning and implementation.

Health education programs at the unit level

Most of the patients seen in the freestanding clinics are men (60 percent); however, because the clinics serve dependents of uniformed services personnel (active duty, retired, or deceased), as well as underserved populations of local communities, children and women of all ages also receive care.

Dependents and underserved populations include individuals from various countries many of whom have little comprehension of the English language. A patient comprehension assessment study at the Norfolk, VA, PHS hospital in 1979 showed that 50 percent of its clients had literacy-coping skills at the 5th-grade level or lower.

In response to a questionnaire about their health education activities, the clinics reported that health education programs have been developed to address the needs of clients who are overweight, diabetic, hypertensive, and smokers. Opportunities for clinic users to learn cardiopulmonary resuscitation are offered in three settings. Breast self-examination, Pap smear screening and oral hygiene instruction frequently are provided. Individual clinics work on such problems as alcoholism, medication, usage glaucoma, stress, low back pain, arthritis, and COPD management. Clinics also report that they counsel parents on family planning measures. In summary, PHS clinics provide services for all ages of the population with varying health education needs and abilities that must be taken into account in program design.

No clinic reported to the Health Education Staff Chief of carrying out a formal assessment of educational needs, although several have used population diagnostic "head counts" to determine numbers of persons who might be expected to need information. Few clinics have developed formal instructional outlines for specific disease categories. The Savannah (GA), Houston (TX), Tampa (FL), and San Pedro (CA) clinics have prepared outlines of education policies and procedures. One clinic has developed a patient education plan for improving utilization of services.

Several clinics submitted policy and procedures documents to the division headquarters. The one from the USPHS Outpatient Clinic in San Pedro is written in general terms with broad objectives and generalized procedures, which refer the practitioner to more specific manuals for details, as shown by the following excerpt:

A. Policy:

The Health Education Unit at this facility has the following functions:

1. To coordinate the planning, development and implementation of health education services and programs for beneficiaries of this clinic, its employees and affiliated community agencies.

2. To stimulate an increased awareness in the clinic staff of the need for good quality patient education in all areas of health care provided. To assist in planning staff training (inservice) programs to develop improved communicator skills and education techniques for use in staff-staff and staff-patient interactions.

3. To identify and assess or help develop resources and materials that may be utilized in educational activities to be undertaken in the clinic.

4. To assist in the establishment and maintenance of cooperative working relationships between community agencies and citizen groups that contribute to health education of the public.

B. Procedure:

The Health Education Coordinator functions under the Medical Unit of the Clinical Section and reports directly to the Chief Medical Officer. The Health Education Coordinator works through and is a member of the Clinic's Patient Education Committee and the Patient Advisory Committee in which position he/she acts as a consultant and resource person in the development of improved health services through patient education.

The following health education programs are functioning to date within the Clinic: diabetes education, hypertension education program, stop smoking program, and an oral hygiene class.

Referral to programs is by health care providers (usually the patient's attending physician) except for the smoking program, which may be by self-referral, and the oral hygiene class which is by dental appointment. Documentation of attendance at all classes is entered in the integrated progress notes of the patient's medical record by the health education coordinator or staff member who taught the class.

The policy and procedures outline from the USPHS Outpatient Clinic in Tampa is more specific, as shown by the following excerpt:

OBJECTIVES

1. It is the objective of the Nursing Service Unit to provide high quality professional nursing services including appropriate patient management, e.g., assessment, education and guidance to the Public Health Service beneficiaries under the direction and supervision of the Chief of Medicine.

PATIENT EDUCATION

1. Documentation of patient education is made in the progress note of the patient's record, including diet instructions, instructions for special proceures, e.g., laboratory, x-ray, minor surgery, sigmoidoscopes, pelvic examinations, instructions for post-joint aspirations, skin care following cast removal, what to watch for after application of a cast, instructions regarding wound care and dressings, diabetic instructions including urine testing, insulin regulation, foot care, infection, etc.

2. Pamphlets on various diseases such as hypertension, diabetes, cancer, heart disease, pulmonary disease, etc., are available for patient education.

3. Oral and written instructions are given to patients regarding the importance of routine blood pressure checks and physical examinations.

4. Patients with pulmonary disease are instructed regarding various tests and treatments available, e.g., pulmonary function tests, positive pressure, etc. They are also advised regarding diet and smoking. Followup care for tuberculosis patients is available at the Hillsborough County Health Department.

5. Instructions are given to patients with heart disease, on doctor's recommendation, concerning diet, exercise and followup care.

6. Routine checks for cancer, e.g., paps smears, breast checks, doctor's recommendations for sigmoids, and other detailed examinations are given for both men and women.

The USPHS Outpatient Clinic in Savannah, GA, has a program plan for consumer (patient) awareness and orientation, which lists the following learning objectives:

1. Each patient will be able to identify the services available at this facility.

2. Each patient will know how to best utilize the service available.

3. Each patient will be able to identify procedures for obtaining access to the facility and/or physicians' services, i.e., appointment, walk-in, etc.

4. Each patient will be familiar with the procedures for making and canceling appointments.

5. Each patient will be able to identify reasons why it is important to keep appointments.

6. Each patient will be familiar with his responsibility for keeping appointments and the clinic's policy of dealing with patients who fail to keep appointments.

7. Each patient will know the operating hours of the clinic, phone numbers, parking facilities, etc.

8. Each patient will know how to obtain emergency services which are beyond the capabilities of the clinic, including emergency care needed when the clinic is closed. (Includes emergency ambulance services and medical care services.)

9. Each patient will be familiar with the Patient Advisory Council, its functions, and members.

10. Each patient will be familiar with his rights and responsibilities as a patient of the clinic.

11. Each patient will be familiar with patient rules and policies.

12. Each patient will be aware of procedures for registering complaints and suggestions, and for making inquires concerning clinic policies and services.

The following teaching objectives are listed:

1. Provide information about all clinic services, including for whom they are available, and where and when, as well as operating hours, phone numbers, etc.

2. Provide pertinent information about patient rules and policies and patient rights and responsibilities.

3. Provide information that states procedures for obtaining clinic services via:

   a. appointments
   b. emergency care
   c. walk-in policy

4. Provide information on after-hours emergency care; also, emergency phone numbers.

5. Provide information on how to best utilize clinic services; why it is important to keep appointments.

6. Provide information, location, and telephone numbers of:

   a. emergency medical services (EMS)
   b. local hospital emergency rooms

7. Provide information about patient representative groups or patient advocates, e.g., Patient Advisory Council.

8. Provide information on the procedure used to register complaints and suggestions or to make inquires about clinic policies and services.

Patient awareness is achieved through a variety of methods and materials including:

- Patient Handbook
- Orientation of patients by Medical Records personnel and/or group orientation program
- Education through Patient Advisory Council
- Posting information on patient bulletin board

- Individual patient counseling as required
- Information receptionist
- Telephone answering service-(after-duty hours)
- Patient surveys

In general the methods of instruction used by clinics, include one-on-one counseling, leaflets, and classes conducted for diabetics hypertensive patients, COPD patients, and smokers. Since each of the clinics has video equipment and access to software, this approach to teaching also is frequently employed. However, the limitations of video systems have become apparent: an individual must be available to answer questions prompted by the material, someone must encourage viewers, and space and quiet are needed. The clinics rely on the recently produced American Hospital Association staff manuals for teaching patients and on other materials in developing programs. The most frequently found clinic-produced leaflet addresses clinic administrative practices. Several clinics produce a patient information newsletter.

The USPHS Outpatient Clinic in San Jacinto, CA, uses a special physician referral form as a means of "pulling together" and disseminating information about its patient education related material. The physician is asked to check those education resources that are deemed useful for the particular patient, who then takes the completed form to an appropriate station where the resources are provided. The checklist section of the form is as follows:

1. Hypertension - Films and literature - refer patient to Nursing _____
   Films: High Blood Pressure _____
   Diet and Your Heart _____

   Medication Counseling - refer patient to Pharmacy

2. Diabetes - Films and literature - refer patient to Nursing _____
   Films: So you Have Diabetes _____
   Insulin Use _____
   Avoiding Complications of Diabetes _____
   Diabetic Foot Care _____

3. Low Back Pain - Film - refer patient to Nursing _____
   Film: Low Back Pain _____

   Back Care Instruction - refer patient to P.T. _____

4. Emphysema - Film and literature - refer patient to Nursing _____
   Film: Emphysema _____

   Postural Drainage Instruction - refer patient to P.T.

5. Smoking - Film and literature - refer patient to Nursing _____
   Film: One More Smoke _____

   Pulmonary Function Testing - refer patient to P.T. _____

Smoking Cessation - refer patient to Patient Education, Mon. - Thurs. _____

6. Stress Management - Film - refer patient to Nursing _____
   Film: I'm Tired _____

   Jacobson's Relaxation Exercises - refer patient to P.T. _____

   Stress Management Education - refer patient to Patient Education, Mon. - Thurs. _____

7. Other Films - refer patient to Nursing _____
   Films: Weight Control _____
   Breast Self-Examination _____
   The Pill _____
   Menopause _____
   Vaginitis _____
   Asthma _____
   Urinary Tract Infections _____
   Peptic Ulcer _____
   Gout _____
   Sexually Transmitted Diseases _____
   Glaucoma _____
   Methods of Birth Control _____

8. Dental Films - refer patient to Dental Station _____
   Films: Brushing and Flossing _____
   Preventive Dental Care _____

Some of the Public Health Service Clinics' health education efforts are devoted to specific problem or content areas. The Ambulatory Service of the Public Health Service Hospital in San Francisco, for example, has a breast self-examination (BSE) program, which serves approximately 120 female patients, per year within the hospital setting. Instruction is provided for about a half hour every other week by a specially trained nurse using models and a film. The USPHS Outpatient Clinic in Memphis has a health education component within the dental clinic, the objective of which is to inform patients of the importance and techniques of preventive dentistry and oral hygiene. The primary target populations are grades one through four at the Hollywood School, and all patients seen for routine dental care. The forms of intervention used are audiovisual cassettes dealing with dental disease and its prevention, and oral hygiene instructions.

The objective of the health education component of the USPHS Outpatient Clinic in Philadelphia is to educate patients on indications, contra-indications, proper use, side effects, and adverse effects of current medications. This program is staffed by one pharmacist and is directed at varied populations. Types of intervention used include: written drug information, verbal counseling, and visual demonstrations.

Staffing, financing, and barriers to health education programs

Each of the eight hospitals of the Bureau has an individual responsible for patient education in both ambulatory and inpatient settings; three of these people have graduate degrees in health education. Only one of the free-standing clinics has an educator, per se, on staff. One clinic has developed an affiliation with a graduate program in health education, and one clinic administrator holds a graduate degree in health education.

A range of health professionals in the clinics carry out health education. Nurses are most often cited, followed by dentists, physicians, pharmacists, and physical therapists in equal numbers. In one setting, a psychologist is involved in stress management programming. Nutritionists are active in several clinics as counselors.

In one clinic, management of the health education function is assigned to an educator. In five settings, the responsibility is shared among a number of staff members, with a patient education committee as the vehicle for planning; implementation usually is carried out by individual health care providers.

Only one hospital clinic has a budget specifically earmarked for health education. In the others, support for materials and equipment comes from the administrative budget. (Recipients are not charged for education services since they are provided by the government at no charge to qualifying beneficiaries.) Although every clinic reported administrative support for education, administrators are usually unable to commit positions or resources to the extent desired because of fiscal rather than policy constraints. Several clinic directors have been active in developing affiliations with universities to secure educational expertise and almost every clinic administration assigns some funds for purchase of needed health education materials.

For the clinics as a group, the most frequently mentioned problems in providing education services are limitations of space and an insufficient number of qualified staff available to carry out activities. Small, busy, and noisy quarters hamper teaching efforts. A lack of patient interest in planned educational offerings also was mentioned by some, together with the fact that a transient clientele made program continuity hard to achieve. Many patients reportedly seek crisis care only, and recruitment and scheduling for educational intervention is difficult. Staff also tend to have unrealistic expectations of results. Factors favoring performance of patient education functions are the interest of staff and the availability of health education resource materials. Two clinics also found educational consultation useful.

Involvement of consumers and health organizations

Each hospital and clinic has a Patient Advisory Council. In four settings, these groups have been involved to some extent in planning and implementation of patient education; they may identify problem areas and screen materials. A number of clinics provide a patient's bill of rights in their patient information leaflets.

Units of the American Cancer Society were reported to be involved in health education programs most often. The American Red Cross; The Heart, Lung, and Arthritis Associations; and local child-abuse and family planning clinics also are called upon for assistance. Relationships with other federal programs may be maintained. For example, the outpatient clinic in St. Louis reports linkages with the following:

- The U.S. Air Force Base Hospital at Scott Air Force Base, Belleville, IL, which provides direct patient care and health educational services to beneficiaries of the clinic in the following program areas: alcohol and drug abuse, weight control, family planning, and smoking withdrawal clinic.

- The Granite City Army Depot, which cooperates with the clinic in a hypertension screening program.

- The Federal Executive Board (FEB), which cooperates with the clinic in providing health education pamphlets for distribution to approximately 30,000 federal employees.

Evaulation of health education programs

By and large, no formal evaluation is being carried out at the clinics. In two settings, a medical record audit and quality assurance audit are used to examine performance. In one clinic, the educator's observations and postprogram interviews with patients constitute the assessment.

The Outpatient Clinic in Savannah has prepared an evaluation outline that incorporates:

1. subjective observations

2. number and type of complaints filed

3. results of Patient Satisfaction surveys

4. a measure of degree to which learning objectives were actually met

5. feedback from the Patient Advisory Council

6. random periodic surveys of "new patients" to determine if they were properly oriented

USPHS Outpatient Clinics

Health Education Case Studies

The following five examples show health care settings that were striving to meet the patient education needs of a predominantly older male population. Before they were closed, the USPHS clinics also served a large number of individuals whose native language was other than English and/or who had difficulty reading. The clinics were in the beginning stages of defining health education goals, services and resources. They show an energetic staff organizing scarce internal and community resources to help meet the health education needs of the people they served.

USPHS Outpatient Clinic

San Pedro, California

The USPHS Outpatient Clinic at San Pedro serves a patient population of American Seamen (55 percent), uniformed service personnel, either active or retired and their dependents, (35 percent), and other government employees who have been injured on the job or are scheduled for pre-employment and annual physical examinations (10 percent). The majority of the patients are adult males, many of whom are poorly educated. There are no pediatric services, but the clinic does serve the special needs of Hansen's Disease patients.

The clinic

The clinic at San Pedro reports to the USPHS Hospital in San Francisco, which provides inpatient and outpatient medical/surgical care for patients as well as administrative support.

The range of health services provided are comprehensive and include: a general medical clinic, with a PAP smear clinic and physical therapy, laboratory, pharmacy, and X-Ray services, an allergy clinic; a dermatology clinic; an ear, nose, and throat clinic; an eye clinic; an orthopedic clinic; a podiatry clinic, a psychology/psychiatry clinic; a urology clinic; and a medical specialist (limited). The medical specialist can be seen only by referral from a primary care physician, except for eye exams for glasses.

The dental clinic offers complete dental care by appointment. This includes oral surgery, periodontal and endodontic treatment, and the construction of bridges and dentures. In addition, the clinic also stresses the importance of disease prevention by taking good care of the teeth.

Although the clinic does not have a medical school affiliation, it does have training agreements with the University of California's Graduate School of Public Health (at Los Angeles). Graduate students can satisfy course requirements by serving at this facility. Affiliation agreements are being negotiated with California State University (Long Beach) and Cerritos College (Norwalk), whereby students pursuing a baccalaureate degree in nursing or certification as a dental hygienist can gain clinical experience at San Pedro's PHS Outpatient Clinic. Another agreement between the Long Beach City Health Department and the clinic enables PHS physicians and nurses to provide health assessments to Indochinese refugees who settle in the Long Beach Area. The local health department processes all laboratory specimens and furnishes the ancillary staff and clinical space.

The clinic at San Pedro employs 60 full-time and 2 part-time personnel and 12 consultants. The professional staff consists of 7 physicians with 1 designated as Chief Medical Officer, 1 nurse practitioner, 1 nutritionist/health educator, 3 pharmacists, 3 physical therapists, 4 dentists, 4 R.N.'s, 2 LVN's, 1 nursing assistant, 1 dental hygienist, 5 dental assistants, 1 medical technologist, 3 medical technicians, 1 physical therapy assistant, and 2 radiology technologists.

Responsibility for health education

The primary responsibility for planning, implementing and evaluating health education programs has been assigned to a patient education consultant who reports to the clinic's Chief Medical Officer. This consultant, a dietician by training, spends 20 hours each week performing health education program activities. Assisting her is the patient education coordinator, also a nutritionist, who devotes 100 percent of her time to health education. These two individuals staff the Patient Education Committee, whose membership includes: the clinic director, a physician, a dentist and a head nurse, and the chiefs of pharmacy, medical records, general services, and physical therapy. This committee, in concert with the Patient Advisory Council, develops health education programs. Program recommendations are reviewed by the facility's medical staff and Executive Committee before being forwarded to the Director for final approval.

Health education activities

The major health education programs offered at the clinic relate to these areas:

- Hypertension: A 90 minute class for patients with high blood pressure is held once a month. A physician, pharmacist, and a dietitian are the speakers and family members of patients are welcome to attend.

- Diabetes: A series of five 90-minute classes covers all aspects of the disease, including its history, definition, treatment and control, the role of diet and medications, and the importance of proper foot care. Speakers include a physician, nurse, physical therapist, dietitian, and pharmacist. Family members are welcome. An informal diabetes support group meeting, lasting 1-1/2 hours, has recently been initiated.

- Smoking cessation: A series of four 2-hour meetings are offered, using a common sense, group approach.

- Nutrition: The dietitian speaks with patients individually about good nutrition and explains special diets ordered by physicians. Return visits are made until patients have reached their dietary goals. Family members also may attend.

- Weight reduction: One-hour group meetings are conducted weekly for interested patients.

- Arthritis: The arthritis program is a series of 1-hour meetings that covers all aspects of arthritis. Speakers include a physician, psychologist, pharmacist, physical therapist, and dietitian. Family members are welcome.

- Oral hygiene: The oral hygiene class is offered to anyone receiving care at the dental clinic. It meets once a week in the Patient Education Center and provides information on plaque control, bacteria, diet and their relationship to gum disease. The dental hygienist demonstrates proper brushing and flossing techniques.

- Breast cancer: Women who attend the PAP clinic are instructed in the proper way to examine themselves for breast cancer.

- Relaxation techniques: Patients with chronic pain are instructed in ways to avoid and/or control stressful situations that contribute to their pain.

- Cardiopulmonary resuscitation: Patients and their family members are shown how to resuscitate individuals who have suffered heart attacks.

- Alcoholics support group: One 1-1/2 hour class is conducted each week by a volunteer to help patients who have returned from the detoxification program at San Francisco Hosptial.

Other health education activities include:

- A quarterly newsletter on health and clinic-related information is distributed to clinic patients.

- The Health Awareness Program (HAP) of the Eleventh Coast Guard District, a consumer-based organization run by volunteers, is designed to collect and distribute information on health related topics and on

all types of services available to Coast Guard members (active duty, retired and dependents) from both the military and civilian communities. The program is administered from Long Beach and serves about 3000 persons in the area.

- A patient satisfaction questionnaire is administered semi-annually to determine whether educational efforts are on target.
- Classes for San Pedro's Home Environmentalist Care Program are held for patients and their family members on nutrition, diabetes and high blood pressure.
- Patient handbooks are distributed on clinic services.
- Supervision and training of health education students from UCLA is conducted at the Medical Center.
- Bulletin boards are used to carry information on health topics and on classes at the clinic and at community organizations.

Future health education plans call for establishing a patient education library and suggested reading list; certain books that have been difficult for patients to purchase might be made available on a cost basis. Contingent upon funding: efforts will be made to mail out the patient newsletters every three to four months, to purchase additional A-V equipment, video cassettes and films and to increase the number of patient booklets available for a charge. Also being considered is improving in patient followup through periodic telephone calls to patients to determine their progress and remind them of future clinic appointments and plans are being made to conduct quarterly classes about CHAMPUS, and to use the patient education room as an AA meeting place.

As examples of unique and innovative aspects of the health education activities, the respondent noted that she (the coordinator) and the consultant have found and written patient aid material appropriate for different reading levels. These materials help to reinforce treatment plans, broaden the patient's understanding, answer questions and give information about common problems. Subjects include medications, common misconceptions and prevention tips, as well as advice on how to use the health care system.

They also wrote a patient handbook to initiate the education process when patients make their first clinic visit. This brochure can help patients decide whether they should attend any of the available classes or programs. It contains sections devoted to the clinic location and office hours, admitting and eligibility requirements, appointments, patient rights and responsibilities, health education classes, and important telephone numbers for emergencies and available services.

The participation of UCLA, PHS and Coast Guard personnel (active duty and volunteers) in developing and implementing the Health Awareness Program has proven to be invaluable experience for the clinic.

Coordination of activities

Because of its particular patient population base, the clinic generally does not relate to other agencies' patient education activities; any coordination that does take place occurs via the Clinic Director in concert with the Patient Health Education Program staff. However, the clinic has an affiliation with the American Diabetes Association in regard to its diabetic program, and Health Awareness Program (HAP) activities are coordinated by the HAP board of directors with involved community agencies (e.g. Naval Regional Medical Center, Long Beach, CA and L.A. County Sheriff's Department). Also, dietitians in The U. S. Public Health Service hospital in San Francisco refer their discharged patients to the San Pedro clinic for followup patient education.

The following organizations have been involved in the clinic's health education activities, primarily as resources for program and class materials:

Organizations	Involvement
American Cancer Society	films, posters and literature for general and class use, (e.g. breast self examination and smoking classes); trained smoking class facilitator.
Arthritis Foundation	literature for general and class use; resource for class information and speakers
American Diabetes Association	literature for general and class use; resource for class information and structure (diabetic program recognized by ADA)
American Red Cross	films and literature for class use
American Dental Association	films and literature for class use
UpJohn Pharmaceutical Company	literature for diabetes class

Searle Pharmaceutical Company	literature for hypertension class
Merck, Sharp and Dohme Pharmaceutical Company	literature for arthritis class
Abbott Laboratories	literature for hypertension class
Butler Company	materials for oral hygiene class
EC Floss	materials for oral hygiene class
Alpha Chi Omega Society	administers the Home Environmental Care Training Program, in which a dietitian/health educator lectures on nutrition for healthy people concerned about prevention, and for people with diabetes mellitus, hypertension and heart disease. The primary goal of this program is to foster family care in the home.

Other pharmaceutical companies and voluntary agencies provide the clinic with a variety of pamphlets and posters.

Federal agencies also supply resource information and materials, for example:

The National Clearinghouse for Alcohol Information and the High Blood Pressure Information Center provide pamphlets, posters and information.

The clinic has an affiliation agreement with the behavioral science and health education division of UCLA's School of Public Health that allows students to do field work at the clinic. Student activities include helping to develop programs for low back pain, arthritis and diabetes.

Information to help develop the evaluative portions of the clinic's education programs has been obtained from the Centers for Disease Control, HHS.

Liaison between clinic activities and the central office is carried out by having the dietitian/health educator report to the Chief of the Health Education Branch, Division of Hospitals and Clinics, at the United States Public Health Service Hospital, Staten Island. Written instructions and lists

of resources available are received from this office. Verbal and written communications are exchanged as necessary between the clinic and Health Education Officer.

At the local level, coordination and cooperation with consumer interests is achieved through the Patient Advisory Council, a group of patient volunteers, appointed by the clinic director, who represent all clinic beneficiaries. One purpose of the group is to assist the director in developing and evaluating patient education programs. The monthly meetings of this Council also provide a forum for announcements of new programs, and scheduling of events. A suggestion box is located in the patients waiting area and additional input comes from the Eleventh Coast Guard District's Health Awareness Program via questionnaires and HAP's six-person Board of Directors.

Evaluation of activities

Classes are evaluated on the basis of class attendance and pre- and post-class questionnaires that test knowledge gained and gauge patient satisfaction. In the planning stages are followup questionnaires for class participants that will be administered at six-month intervals to determine behavioral changes, physical condition, and compliance with medications and appointments.

A clinic-wide patient satisfaction questionnaire also is provided (see appendix A). The respondent reports that this questionnaire will be revised to eliminate redundancy, focus on more specific target audiences, and explore areas where the patient may be more involved in treatment discussions.

The respondent notes that she has received a great deal of personal and professional satisfaction as the patient education coordinator and that patients appreciate these efforts a great deal. The clinic seems to attract many new patients who will gladly drive long distances to attend the classes.

Major barriers

The language barrier is a major problem facing the clinic. Aside from having a large number of patients who speak languages other than English as their primary language, there is a large contingent of American seamen who are unable to read beyond a 6-7th grade level. Another problem is the lack of adequate resources to achieve goals set by the clinic.

To overcome these difficulties, efforts have been made to rewrite educational materials to appropriate reading levels. The clinic also limits the number of participants in each class to facilitate discussion. Patients and family members are encouraged to speak with clinic staff as problems or questions arise.

The respondent reports that attitude improvements have been achieved by discussing with the patient his feelings about the diagnosis before moving on to the therapy, by emphasizing the importance of understanding the therapeutic regimen, and, by reinforcing verbal instructions with written statements. Also, attempts are made to simplify the therapy as much as possible. Patients are encouraged to ask questions, and to recite their therapeutic plan.

Appendix A

U.S. PUBLIC HEALTH SERVICE OUTPATIENT CLINIC

SAN PEDRO, CALIFORNIA

PATIENT SATISFACTION SURVEY

Dear Patient:

We are trying to improve the care given at this clinic. To do this, we need your help. Please fill out this questionnaire by checking the line that best states how you feel about each question. Questionnaires can be returned in the clear plastic boxes located outside Room 223 and in the Pharmacy, also in the second and third floor waiting rooms.

	Always	Sometimes	Never	Does Not Apply
1. I feel the care I get at the clinic is helping me.	____	____	____	____
2. I feel that the people at the clinic are as concerned about my care as I am.	____	____	____	____
3. The people at the clinic explain my health and dental problems to me.	____	____	____	____
4. This explanation is given in words that I, a non-medical person, can understand.	____	____	____	____
5. The people at the clinic have answered all my questions by the time I leave the clinic.	____	____	____	____

6. How often are these clinic people helpful and polite?	Always	Sometimes	Never	Does Not Apply
Admitting Clerks	____	____	____	____
Appointments Clerks.	____	____	____	____
Dental Assistants.	____	____	____	____
Dental Hygienist	____	____	____	____
Dentists	____	____	____	____
Dietitian.	____	____	____	____

Health Educators	____	____	____	____
Laboratory People.	____	____	____	____
Medical Record People. . . .	____	____	____	____
Nurses	____	____	____	____
Pharmacists.	____	____	____	____
Physical Therapists.	____	____	____	____
Physicians	____	____	____	____
Social Service Clerk	____	____	____	____
X-Ray Department People. . .	____	____	____	____
7. How easy is it to make an appointment by phone?	____	____	____	____
8. How easy is it to make an appointment in person?	____	____	____	____
9. I am given an appointment with the same doctor.	____	____	____	____
10. I am given an appointment with the same dentist.	____	____	____	____
11. It is easy to hear my name called over the loudspeaker in the 3rd floor (main) waiting room.	____	____	____	____
12. The clinic is clean	____	____	____	____
13. The bathrooms are clean.	____	____	____	____
14. The time I usually spend waiting before I am seen for a scheduled appointment is:	____	____	____	____
	0 - 15 MINUTES	15 - 30 MINUTES	30/more MINUTES	Never USED
15. Check how long you usually wait for:	____	____	____	____
a scheduled dental appointment	____	____	____	____
a scheduled medical appointment	____	____	____	____
a scheduled physical therapy appointment	____	____	____	____
a scheduled dietitian appointment	____	____	____	____
electrocardiogram (EKG)	____	____	____	____

laboratory tests (blood, urine)	____	____	____	____
x-rays	____	____	____	____
medications	____	____	____	____

16. How long did it take you to get a medical record the first time you came here? ____ ____ ____ ____

17. The walk-in clinic is: _____

18. The patient education classes are: _____

19. The food machines on the main (3rd floor) floor are: _____

20. The parking at the clinic is: _____

21. How well do the elevators run? _____

22. The hours and days the clinic are open: _____

23. The clinic as a whole (the building, the health care given and how people treat me) is: _____

24. List two things you like about the clinic. _____

_____

_____

_____

25. List two things you do not like about the clinic. _____

_____

_____

_____

	American Seaman	Active	Uniformed Services Retired	Dependent	Other
26. My patient category is:	____	____	____	____	____

	0-5 yrs	6-10 yrs.	11-15 yrs	16/more yrs
27. I have been a patient at this clinic for:	____	____	____	____

USPHS Outpatient Clinic

Chicago, Illinois

This clinic provides comprehensive care to military personnel and their dependents. This population accounts for over 50 percent of the 45,000 visits to the clinic last year. Active duty military personnel, ranging in age from 17 to 45, constitute the smaller of these two patient subgroups, the bulk being retired personnel, which includes a large number of persons who are middled-aged and who suffer from chronic illness. Over 45 percent of the patients seen at the clinic are federal employees, primarily from the Post Office, who have been injured on the job. Consequently, this PHS clinic treats a sizable number of orthopedic cases, especially low back pain and bursitis.

The clinic

The clinic employs 40 persons, including five primary care physicians. There are no medical school affiliations, but a contract with Northwestern University provides for six-month rotations of an orthopedic resident, who visits the clinic twice a week, and a rheumatology fellow, who visits once a week. Consultants in orthopedics, podiatry, dermatology, gynecology, cardiology, rheumatology, opthalmology, optometry, ENT, neurology, and psychiatry may be called, primarily from the ranks of private practice.

Responsibility for health education

The person charged with coordinating health education activities at this clinic is a physical therapist who reports to the chief medical officer. Her education activities are performed on a part-time basis (15-20 percent), as needed. When staff members identify a specific need (e.g. the Pharmacy Department identifies the need for a poison prevention program) the health education coordinator is notified and a program is developed.

A Patient Advisory Council, consisting of representatives from high-user patient groups (retired, active duty, PHS officer, dependent wife, Coast Guard, etc), provides clinic staff with suggestions for changes or on new information or program needs.

Health education activities

The respondent reports that currently there is no formal comprehensive health education program plan, but rather several activities that contribute to patient education, such as:

- a newsletter, published quarterly, and available at the clinic waiting area. This newsletter provides announcements of new services and personnel appointments, and changes in clinic schedules; features a specific clinic department each issue, outlining duties, responsibilities and personnel in the department; and devotes space to articles by staff, such as the pharmacist or dietician, who provide patient information, education or assistance on health problems.

- pamphlet displays and videotape programs in the waiting room area and the pharmacy.

In the planning stages is a program that will use a dietitian and other professionals to provide health education to patients on a one-to-one basis in the areas of nutrition, foot care for diabetics, and prenatal exercise.

Evaluation of activities

There is no formal ongoing process of program evaluation. A patient questionnaire, administered to the clinic patients every spring, asks the following questions:

1) have you used any of the patient education material?

2) have you found the patient education material to be helpful?

3) do you understand your medications?

Based on the replies to this questionnaire, the respondent reported that she would like to develop a health education program in the pharmacy since there seems to be a large gap in patient knowledge about medications. The pharmacist also suggests that food interactions should be covered in a health education program. (Prescriptions are filled from the patients' charts, so the pharmacist is in a position to check patient compliance with and abuse of medication regimens).

Although the Patient Advisory Council has been helpful in providing suggestions of health education or information needs, the respondent questions whether this group of "enthusiastic" individuals, who are "tuned in" to needs and always looking for materials, adequately represents the majority of clinic patients, who tend to be less demanding or less interested in and perhaps less capable of understanding health education programs.

Major barriers

Lack of financing and personnel are listed as the major problems that face the clinic as far as developing health education programs. Despite these problems, the respondent reports progress in getting things done, primarily by

learning to "scrounge" and to take advantage of borrowing personnel (e.g. the dietician through the contractual service budget) and materials (e.g. the back skeleton from the physical therapy budget).

USPHS Outpatient Clinic

Old San Juan, Puerto Rico

This clinic handles between 20,000 to 23,000 visits each year. Three-fourths of the patient population are Puerto Rican, the remainder from the continent. Most of the patients represent middle-to lower-income individuals, and the primary patient load lives in an urban (greater San Juan) environment. The population served largely consists of American Seamen (45 percent), Coast Guard personnel (20 percent), and military retirees (15 percent). Most of the Puerto Rican patient population (80 percent) are Seamen, many of them older and disabled, whereas most of the Coast Guard patients (20 percent) are United States citizens, and are a younger population. The military retirees are predominantly Puerto Rican. About 40 percent of the patient load is over 50 years old, and a "surprisingly" large number are over 65 years of age. Many of the patients cannot read Spanish or English.

The clinic

Twenty-seven full-time and two part-time personnel are employed by the clinic. Through affiliation agreements with the University of Puerto Rico School of Medicine, student training positions have been created within the pharmacy. There are also health education and administrative residency positions.

The clinic offers a comprehensive range of primary care services, including medical, dental, laboratory, x-ray, and pharmacy services, as well as in-house consultant services, such as psychological and nutritional counseling. The staff includes four physicians, two nurses, and one dentist. Patients in need of consultant and hospital services not available on-site are referred to other local facilities or to the USPHS facilities in the States, primarily the USPHS Hospital in New Orleans.

Responsibility for health education

According to the respondent, who has since been transferred to the USPHS Clinic in Detroit, the San Juan facility was in the formative stages of developing a health education program before legislation was enacted to close all USPHS Hospitals and Clinics. The information provided in his case study, therefore, represents what was planned rather than what has actually taken place.

Initial plans called for the clinic director, chief medical officer, and health education officer (a trained pharmacist) to plan, implement, and evaluate the health education program in conjunction with the Health Education

Program at the University of Puerto Rico. The University designated one resident from the Masters in Public Health Program to serve for one full day a week. Several graduate students majoring in health education visited the clinic before the University Dean and Public Health Program Director chose a particular individual for the position.

Patient questionnaires and the opinions of medical officers were used to determine the level of patient interest in health education.

Health education activities

Fully developed educational programs had not been developed by the time the questionnaire was completed. Current activities included:

- showing video tapes on a variety of subjects to the clinic patients
- individual counseling by physicians, the pharmacist and nurses
- occasional referrals to the consultant dietician

The intent of the health education planning group was to have the newly placed health education resident conduct a needs assessment and, on the basis of the findings, integrate the existing activities with a series of classes to be developed on diabetes, hypertension and smoking, etc.

Coordination of activities

To insure consumer involvement in the planning and appraisal of health education activities, patient questionnaires were to be distributed on a quarterly basis. There was an overwhelmingly affirmative response to the idea of health education by the clinic patient population according to the questionnaire administered initially. Plans also were made to tap the thoughts and recommendations of the Patient Advisory Council (made up of representatives of the beneficiary groups) with regard to health education needs and program satisfaction.

Evaluation of activities

No evaluation had been performed, since the educational programs had not begun.

Major barriers

The respondent identified the major barrier as the limited number of staff members who are responsible for many other duties in this small organization. The clinic also has no operating budget earmarked for patient education. Another problem is one of language, although auxiliary personnel are on hand to interpret when needed. Staff interest in health education is listed as the major factor in support of the decision to proceed with a patient education program.

USPHS Outpatient Clinic

Tampa, Florida

This outpatient facility serves approximately 10,000 American Seamen, fishermen, active duty and retired military, and their dependents. The average patient age is 58. Pediatric patients are rarely seen at this clinic. Fifty-five percent of the patient population are retired military personnel on fixed income and many of them have chronic health problems. The patient population lives predominately in urban-suburban areas around Tampa.

The clinic

The clinic is staffed by 37 employees, including 5 physicians, 3 dentists, 3 dental assistant/hygienists, 4 nurses (2 RNs and 2 LPNs) 2 pharmacists, 1 pharmacist technician, 3 medical laboratory technicians, 1 radiologist, 1 dietitian, and 1 physical therapist. The administrative support staff includes a director, deputy director, administrative officer, fiscal officer, five medical records personnel, a supply clerk, and secretarial staff. When needed, additional physician consultants may be contracted. Comprehensive health care services are offered to the beneficiary population. Clinic visits total approximately 44,000 per year. Of these, about 5,000 patients go through a patient education process.

Responsibility for health education

The responsibility for coordinating health education programs and activities is assigned to the clinic's Deputy Director. Planning and implementation of programs are the joint responsibility of the Chief of Medicine, the Deputy Director and the nurse supervisor. Approval of educational programs is granted by an executive committee made up of the above mentioned personnel plus a pharmacist, social worker, and dental chief. If a particular program is thought to have an impact on the functions and duties of a specific unit, approval also is sought from the unit chief, as well as nurses and allied health personnel who might be called upon to administer or implement the program.

Program development is based on:

1. Health care needs identified by the Quality Assurance Committee (consisting of the physicians, the social worker, a nurse, and the clinic Deputy Director)

2. Patient surveys

3. Utilization review

4. Evaluations by patients who have participated in classes, and

5. The Patient Advisory Council

Health education activities

The process of patient health education takes place in the context of quality assurance standards established for each of the major clinical problem areas. Currently in effect are educational programs on hypertension, diabetes and glaucoma targeted for the beneficiary population and federal employees; programs on rape and on self examination for cancer of the breast or testes targeted for federal employees; and a program on cardiopulmonary resuscitation targeted for the beneficiary population and federal employees, as well as for teenagers, college students and the general public. An innovative aspect of the hypertension program is the teaching of relaxation techniques; according to the respondent, this has been well received by the clinic attendees.

Coordination of activities

Coordination of health education activities is achieved through communication among the Executive Committee, the Quality Assurance Committee, and a Patient Advisory Council, which includes representatives from each of the beneficiary groups. This Council meets quarterly on the call of the chairman, who is elected by the group. Members of the clinic staff attend by invitation. The Council prepares its own agenda and deals with specific issues or problems. Recommendations from the Council are forwarded to the Clinic Director, Deputy Director and the Executive Committee, who may act on the recommendations or develop options that are presented back to the Council. An example of an action taken as a result of the Council's recommendation is a change in procedure that separates glaucoma patients from others undergoing eye tests so they do not have to wait for screening.

Consumers are encouraged to become involved in the planning and evaluation of health education activities through a patient satisfaction questionnaire, a patient newsletter, which is written by the Deputy Director, posters that request patient attendance and involvement in scheduled activities, and the Patient Advisory Council. Also, in a two-week followup of individual programs, participants are asked for suggestions regarding future educational programs that would be of interest. The dietary component of the hypertension program grew out of a patient's request.

The health education programs are relatively new to the clinic, the oldest having been initiated only two years ago. The clinic staff had anticipated expanding into other areas, including respiratory disease and therapy, and cancer screening and therapy. The coordination necessary to design and

implement health education activities is exemplified by the low back pain exercise program. A protocol for such a program was developed by a physician and physical therapist with the help of the deputy director (health education coordinator), using materials and literature supplied by the Central Office. The unit chief responded to the program's content and the Executive Committee reviewed and approved the protocol and administrative aspects of the program. Following Patient Advisory Council's approval, the program was implemented.

The clinic cooperates with a number of outside agencies in carrying out various health education activities. For example, the clinic staff teaches CPR procedures to students at the University of South Florida and to members of the local Explorer Scout unit. Reports of CPR activities are submitted to the American Heart Association and reports on glaucoma classes are submitted periodically to the National Society for the Prevention of Blindness. The Sheriff's Office conducts rape prevention programs in conjunction with the clinic staff. The central USPHS office is used occasionally as a sounding board when new ideas are being considered.

Evaluation of activities

Evaluation of the clinic's health education activities is achieved through four different processes. Some of the individual programs conclude by testing the patient's knowledge. Then, two weeks after completion of the program, letters are sent to the patients at home, asking them (1) how often they practice the therapeutic regimen established at the clinic, (2) what problems they are encountering in regard to maintaining their health, and (3) what suggestions they have for improving the program. Also, patient records are occasionaly audited to determine changes in compliance with medications and appointments. The fourth and last evaluative procedure is the request (made every six months) of all patients to fill out a patient satisfaction questionnaire, which is completed during a clinic visit. Patients are asked whether they are aware of the education classes offered, whether they have attended, whether they have found the classes beneficial, and what other programs the patients would like to have available.

Major barriers

The major problems faced in developing and implementing health education programs reportedly are the lack of sufficent staff to conduct them, and the difficulty of scheduling programs so they coincide with medical appointments. To overcome the first problem, the clinic is attempting to recruit volunteers who are specifically interested in or have had experience in health education. To deal with the second problem, the appointment books have been examined for a three-month period to see whether classes can be coordinated with clinic visits.

USPHS Hospital

Nassau Bay, Texas

The mostly urban population served by this facility includes American Seamen (active duty, retired military, and their dependents), as well as Indochinese refugees in the Houston area. The total target population numbers about 100,000 and represents a broad range of age and socio-economic groups (50 percent white, 10 percent Indochinese, 35 percent black, 5 percent Hispanic). About 10 percent of the Indochinese speak no English.

The clinic

The outpatient clinic at this facility has 22 full-time employees, including physicians, nurses, pharmacists, dentists, a physical therapist, optometrist, laboratory and radiology technicians, and secretarial and medical record staff. The clinic provides comprehensive ambulatory care services to patients who make approximately 30,000 visits each year. The physicians assigned to the clinic also hold appointments in other area hospitals and many are in private practice.

Responsibility for health education

Health education does not have departmental status within the outpatient facility; instead, it is considered an "activity section." Currently, a nurse practitioner coordinates the patient education activities, aided by pharmacy staff, and by students from the Sam Houston State University School of Health Education. Patients are encouraged to avail themselves of patient education services as they do all other health care services. Less than five percent of all outpatient visits are made solely for education purposes. Most patient education encounters are generated by professional referrals in the course of patient care.

The Sam Houston State University students assigned to the clinic are majoring or minoring in health education, and receive academic credits for their work. At a given time there may be from one to three students working, within a flexible schedule, for 40 hours a week over a six-week period. Depending on their qualifications and interests, these students may engage in one-to-one encounters with patients or be assigned to specific projects; They are responsible as well, for literature searches or materials acquistion.

The planning of health education activities is done by the students, nursing staff and pharmacists. The students and clinic staff implement the programs, and the former are responsible for evaluation of the programs. Ideas for new educational activities are reviewed by clinic staff who would be affected by

them. If there is a consensus among these staff members that the suggested project has value and that resources are available, the idea is sent back to the originator for further development and implementation. Final approval of health education activities rests with the medical staff, clinic director, chief pharmacist, chief nurse and the health education students.

Health education activities

The major patient education programs offered include hypertension control for the total clinic population, smoking cessation, diabetes control, and cancer screening for all females on base.

The respondent notes that an innovative aspect of the clinic's health education activities is the team approach, using a health education student along with one or more of the health professionals in an attempt to integrate health education into the basic patient treatment plan. A student may be assigned to a specific individual, more often to a physician or nurse, or may work with other professionals on a project basis. Requests for health education sessions are entered into the medical record; there may be an immediate referal to an education session with a nurse or student, or the patient may be asked to return for a separate session upon the next appointment.

Coordination of activities

To encourage consumer involvement in the planning of health education activities, patients are interviewed by students in the waiting areas and are asked what they want to know or would like done. This procedure has been relatively effective, according to the respondent. It led, for example, to establishing the stop smoking seminar.

The faculty at Sam Houston State University School of Health Education serve as preceptors for the students assigned to the clinic. In coordinating the role of these students, consideration is given to the student's major and the availability of transportation to and from the base. The San Jacinto Lung Association and the local chapter of the American Heart Association have worked with the students during the summer months and, on request, have provided literature and materials that are used in patient health education sessions. The Central Office of Health Education occasionally is used as a resource center and a sounding board for new programs.

Evaluation of activities

Evaluation is performed at two different levels. Students may administer patient knowledge tests in interviews prior to and after appointments. Followup interviews also are used to measure changes in weight and blood pressure during the course of therapy.

Major barriers

An ongoing problem in implementing health education programs is patient compliance with the medical regimen or with the recommended life style changes (weight loss, blood pressure control, stop smoking). Limited staff support and a lack of willingness to devote resources without an immediate visible payoff for either the patient or the medical staff are other obstacles mentioned by the respondent. Often, the decision to employ or conduct educational sessions is contingent upon whether the students are around to do the work. To counter these obstacles, the educational programs have been structured on an individual patient-provider basis, rather than require the additional time and resources needed for class activities.

Veterans Administration
Health Education Programs

Much of the information provided here is derived from a summary of the Veterans Administration report, Patient Education: A View from the Crossroads, prepared by Nan Stout, M.P.H., Chairperson, VA Task Force on Patient Education. The report presents the findings and recommendations of the National Task Force on Patient Health Education, appointed by the Office of Academic Affairs, Veterans Administration Central Office, in April 1977. The task force was charged with developing long-range goals and strategies for the orderly expansion of patient health education through coordination and utilization of existing resources, manpower development, and research and clinical trials.

Organizational overview, purpose, and mission

The VA health care system is the largest centrally directed, health care system in the nation. In 1978, it was composed of 172 medical centers, one independent domiciliary, and 47 satelite or independent clinics. All of the medical centers provide hospital and outpatient care. There are one or more VA medical centers in each contiguous state, the District of Columbia, and the commonwealth of Puerto Rico. In Alaska and Hawaii, the VA operates outpatient facilities and provides for hospitalization and extended care under contract with non-VA health care facilities.

The facilities are staffed with an average full-time equivalent of about 190,000 people, including 11,000 physicians, 1,100 dentists, and 27,000 nurses.

The VA provides health care to about 2.5 million of the country's veteran population of almost 30 million. It also furnishes medical care to the spouses or children of certain service-connected veterans. Of those receiving hospital care on a typical day in VA facilities, 98 percent are male and 26 percent are 65 years of age or older. More than 60 percent have annual family incomes of less than $7,000. During fiscal year 1978, the VA received 2,494,897 applications for care. Of the 2,421,902 applications processed, 82.9 percent were accepted: 39.1 percent for hospital care, 43.3 percent for ambulatory care, 0.2 percent for nursing home care, and 0.3 percent for domiciliary care.

The VA has several long-term programs for veterans, including: nursing home care; community nursing home care; domiciliary care; state home care; and the geriatric research, education, and clinical centers program. By 1978, thirty VA medical centers were capable of providing home health care services; in that year, 10,410 patients were treated in the home care program.

The functional arm of the VA that administers and operates this medical care delivery system is the Department of Medicine and Surgery, which is headed by a chief medical director who is responsible to the administrator of veterans affairs for all agency medical programs. The Department of Medicine and Surgery is organized into seven offices: Academic Affairs, Administration, Dentistry, Extended Care, Policy and Planning, Professional Services, and Research and Development.

The Department of Medicine and Surgery has established 28 medical districts to coordinate planning and services among the separate medical centers, and to encourage appropriate distribution and sharing of resources within a geographical area.

Administrative support for health education

The first official statement on patient health education appeared on April 23, 1953, when the Department of Medicine and Surgery issued a technical bulletin on the subject. Since then, there have been many VA programs and projects directed at health education of veterans, but a review of these programs, conducted by the Central Office in the early 1970s, "suggested the VA did not have a true commitment to patient health education and that the (VA) system lacked an organizational structure or system to encourage its delivery."

In 1974, the Office of Policy and Planning submitted a proposal to fund patient health education coordinator positions in each medical district to serve as focal points for the development and coordination of patient education programs. Positions in five medical districts were funded. In July 1975, the Patient Health Education Program was allotted a part-time staff position in the Office of Academic Affairs, Allied Health Division, Veteran Administration. In April 1977, the Office of Academic Affairs appointed a task force to develop goals and strategies and to initiate plans for the orderly expansion of patient health education. The task force also was requested to examine ways of approaching "education about the health care system (VA and other) and education about the veterans' personal health." In April 1980, 13 new positions were allotted to patient health education. Thus, a total of 18 full-time positions have been formally designated.

Organization of the VA education network. The VA education network has levels of organization similar to the Department of Medicine and Surgery described above, with linkages between the levels-as well as externally to the VA system. The national education network is a composite of sub-networks--Cooperative Health Manpower Education Programs, Regional Medical Education Centers, Veterans Administration Medical Centers, universities, colleges, academic health centers, national and federal education organizations. At the national level, the Office of Academic Affairs is administered by an Assistant Chief Medical Director and is organized into three services: Continuing Education and Staff Development, Learning Resources, and Affiliated Education Programs.

At a regional level, the Office of Academic Affairs operates two types of education centers: Regional Medical Education Centers (RMEC) and Cooperative Health Manpower Education Programs (CHEP).

Regional Medical Education Centers are located in geographically dispersed areas of the country (Northport, New York; Birmingham, Alabama; Cleveland, Ohio; St. Louis, Missouri; Minneapolis, Minnesota; Salt Lake City, Utah and Long Beach, California). The average size of the regions is twenty-five medical centers.

The RMECs serve as the focus for coordinating, planning, and implementing VA continuing education activities for all categories of professional and non-professional VA employees.

The liaison between the RMEC and the medical center is the Chief of Staff through the center director. The Chief of Staff, in addition to being responsible for patient care and research services, is accountable for education activities conducted in the medical center. Institutional planning and coordination for educational activities may be delegated by the Chief of Staff to a full-time Associate Chief of Staff for Education (ACOS/E). For those medical centers not having an ACOS/E, the Chief of Staff selects an individual to be responsible for coordinating education activities between the medical center and the RMEC.

The Cooperative Health Manpower Education Programs are located in rural areas of the country (Togus, Maine; Erie, Pennsylvania; Tuskegee, Alabama; Saginaw, Michigan; Lincoln, Nebraska; and Boise, Idaho) and range in size from a tricommunity geographic area to a state area. The Cooperative Health Manpower Education Program is a consortium consisting of a VA medical center and non-VA health manpower resources operating in a defined geographic area. The CHEP is linked to community resources through a board of trustees representing members of the consortium. The purpose of the consortium is to assess the community's health manpower educational needs and the capacity of its institutions for meeting those needs through joint action.

At the medical center level, the chief of staff acts as assistant to the director in the direction and coordination of the educational activities of the hospital, including liaison with the RMEC. In selected circumstances, when the size and complexity of these programs require that responsibility and authority for them be assigned to a specifically qualified individual, an Associate Chief of Staff for Education may be appointed with the concurrence of the Assistant Chief Medical Director for Academic Affairs, VACO. In approximately forty percent of the VA medical centers, an ACOS/E has been appointed to coordinate institutional planning for education activities. The ACOS/E may be required to: control and distribute continuing education funds; control and supervise learning resources (library, media production, closed-circuit television); coordinate continuing and inservice education programming; establish and maintain affiliation agreements; initiate, review, and monitor educational proposals; provide educational consultation to

committees that have functions relating to education; coordinate medical/dental, nursing, and other allied health education programs; assign and monitor educational space; assist centrally supported instructors; coordinate patient education programming; liaise with RMECs and VACO; coordinate orientation for students and staff; and facilitate physicians and dentists in-residence programs.

Levels of Patient Education Activities

1. National level: On November 29, 1976 the Chief Medical Director designated the Office of Academic Affairs as the administrative focus for the Patient Health Education Program and charged the Assistant Chief Medical Director for Academic Affairs (ACMD) with developing long-range goals and strategies for patient health education in the VA system.

The ACMD assigned the patient health education program to the Continuing Education and Staff Development Service, including authority and responsibility for:

- Initiating long-range planning for patient health education
- Developing VA policy and standards for quality patient health education
- Monitoring the quality of patient health education throughout the VA system
- Conducting surveys of needs for patient health education
- Coordinating education and training of health care providers in patient health education
- Providing consultation and direction to regions and facilities in patient health education
- Evaluating patient health education programs in the system
- Developing collaborative research projects and field trials

2. Regional level: Each Regional Medical Education Center is directed to provide consultation, technical assistance, and staff development in patient health education to each VAMC in the area served by the RMEC. The RMECs assist the Continuing Education and Staff Development Service in long-range planning and development, quality assurance, and research initiatives for the patient health education program.

3. District level: The District Patient Health Education unit is directed to provide for overall planning, and to improve the coordination and quality of patient health on activities for the medical centers and clinics located in VA Medical District 14 (Michigan). The District PHEC assist the continuing

Education and Staff Development Service in long-range planning and development, quality assurance, staff development, and research initiatives for the Patient Health Education Program.

4. Local level: Each medical center is responsible for providing quality patient health education services. An administrative structure is to be established in the office of the Chief of Staff to direct and support patient health education activities.

The structure may take the form of a multidisciplinary advisory committee, a part or full-time Patient Health Education Coordinator, or a Patient Health Education Division in an Education Service. Policies and procedures are to instituted to guide needs assessment, planning, implementation, coordination and evaluation of patient health education services, as well as resource allocation. Medical centers are to assist the Continuing Education and Staff Development Service in long-range planning and development, quality assurance and research initiatives for the patient health education program.

Role of the patient health education coordinator

This job title is used for four different positions at the national, regional, district and hospital levels. The similarities and differences in function are outlined in the matrix below, but one critical factor merits special emphasis: none of the coordinators is a teacher of patients. Their primary mission is to assist VA facilities to deliver higher quality patient health education services, not to educate patients themselves.

Patient Health Education Coordinators

Tasks	National	RMEC	Hospital
Program design and administration	Emphasis on national initiatives and administration of program resources	Primarily for RMEC-sponsored efforts	Major activity: responsible for hospital-wide development and coordination
Consultation and technical assistance	Primarily with other VACO units and outside agencies	Major activity: expert resource to VAMC's re: design & evaluation of PHE programs	Primarily with local staff re: design of specific PHE programs
Training and staff development	As indicated: emphasis on communication about PHE program activities	Emphasis on development of full range of learning opportunities throughout region	Emphasis on short-term efforts re: implementation of of local programs
Policy development	Major activity, along with long-range planning	As indicated: in conjunction with other RMEC & PHE staff	As indicated: under supervision of ACOS/E

The National Coordinator for Patient Health Education is assigned to the Continuing Education and Staff Development Service of the Office of Academic Affairs. This person is responsible for overall planning and direction of the patient health education activities and services for the Department of Medicine and Surgery. The purpose of this position is to increase the capacity of the Veterans Administration to respond to the current and future needs for health education of VA beneficiaries by providing system-wide direction, coordination, planning, and evaluation of patient health education services. The ACMD for Academic Affairs provides policy direction.

At the regional level, the Patient Health Education Coordinator's primary role is to provide professional leadership, expert consultation and technical assistance to the 20-30 VAMC's in the region on matters related to patient health education. Emphasis is on development of a full range of learning opportunities (from individual tutorials to regional conferences) for staff throughout the region to improve their ability to deliver quality PHE services. The coordinator is reponsible for integrating these activities within the overall mission and function of the RMEC and the regional facilities.

The Office of Academic Affairs converted all District Patient Health Education Coordinators and District PHE Units to the base medical center, except for the VA Medical District 14 (Michigan). The District PHEC provides leadership and long range planning for VA Medical District 14 health education activities. The District PHEC provides and receives technical assistance and consultation with the National Coordinator, Regional Coordinators, and Medical-center-based coordinators.

The patient health education coordinator at the medical center level is administratively responsible for the implementation, coordination, and evaluation of all medical-center-based patient health education activities.

The patient health education coordinator provides consultation and guidance to the center director, chief of staff, and service chiefs as well as direct care staff. The patient health education coordinator must frequently identify the origin of problems and assist the staff to develop an approach to meeting the goals and objectives of the institution.

Learning resources support

Libraries in the VA Library Network (VALNET) are an important link in the overall provision of patient health education. They are a valuable source of health information for patients and their families. The range of PHE materials and services provided by VA libraries varies from a patients library with a small health education book collection, to a health education learning resources center with a full complement of multi-media materials, scheduled informational programs, and space for patients and their families to learn

about hypertension, diabetes, heart disease, and many other diseases and conditions.

VA libraries also provide instructional materials designed to help health care professionals plan and implement a meaningful health education program. The librarian works with the direct patient care provider to identify information need, and to provide appropriate print and nonprint materials.

At the national level, the Library Division supports patient health education programs by funding improvements in patient health education collections. These funds can be used to purchase books, audiovisuals, models, charts, furniture, and equipment needed to begin or expand library support of patient health education.

To make maximum use of limited resources, the Library Division purchased some selected VA and commercially-produced audiovisuals related to patient health education. Depending on their anticipated use, these audiovisuals may be sent to all VA libraries for use in their own facilities. In other instances, centrally purchased audiovisuals are sent to a few designated facilities or to twenty-eight special libraries (district software delivery sites). These libraries maintain libraries to be shared with other VA libraries in their area. Sharing of resources also is promoted by the development of consolidated, or "union" lists of books, periodicals, and audiovisuals. By using these lists, librarians can identify pertinent patient health education materials, and in many cases, borrow them from other VA libraries.

Information concerning union lists, audiovisuals, and patient health education materials and support activities can be found in the VA publication, VALNET Information Bulletin. The newsletter regularly features a section on patient health education.

Medical Media Production Services (MMPS) are in operation at 104 VA facilities. A part of the mission of each MMPS is to assist in the design and production of patient education materials for use at a local level. MMPS also coordinates audiovisual equipment used to promote patient education with available media products. Existing closed-circuit television distribution systems and networks, including interactive links with affiliated medical schools and schools of associated health professionals, are being evaluated to assess their impact and long term effectiveness.

Evaluation of health education activities

Although, multiple informal evaluation efforts are ongoing in VAMCS, to date there has not been any formal evaluation of the VA system's patient education program, either at the national, regional, or hospital level. The need for such activity, however, has been documented in the 1977 task force report, Patient Health Education: A View From the Crossroads. In it, the task force proposed that goals for patient health education be delineated on a short-range, intermediate-range, and long-range basis. Short-range goals (3-5 years) are to stress appropriate utilization of health care services and

increase control of risk factors and long-range goals (10-20 years) are to center on reducing the incidence and costs of disabilities, diseases and deaths related to modifiable behaviors.

The task force selected three key strategies to enable the VA health care system to achieve the goals. The strategies proposed are:

(1) coordination and utilization of existing resources
(2) manpower development
(3) research and clinical trials

The first strategy for an orderly expansion of patient health education is the coordination and utilization of existing resources at the Veterans Administration Central Office, at the District level, and at the medical center level. Several sub-strategies, involved in the coordination of resources, relate to evaluation, namely:

- Initiating long-range planning for patient health education

- Developing VA policy and standards for quality patient health education

- Monitoring the quality of patient health education throughout the VA system

- Conducting surveys of needs for patient health education

- Continually evaluating patient health education programs in the system

- Developing collaborative research projects and field trials

The task force recognized that a second major component of the plan for improved coordination and utilization of resources was clarification of how individual VA medical centers function in this area. A number of essential conditions related to evaluation need to exist at the local level, including:

- Policies clarifying the patient education component of care and policies that guide the planning, implementation, and, evaluation of that component

- Standards, audit and evaluation systems to monitor and assess the effects of education on behaviors related to treatment and health status

The task force made reference to considerable duplication in program planning throughout the VA system resulting from many facilities developing similar programs independent of efforts in comparable institutions. This suggests a need for joint planning and collaboration on selected disease-specific programs. Recommendations were therefore made to develop and improve planning and evaluation mechanisms for on-going patient health education activities, including:

- Increased use of integrated audit procedures with greater attention to patient outcomes

- Development of guides for planning patient health education programs and training staff to use the guides

- Documentation of current activities and needs through surveys at each medical center

- Development of standardized evaluation tools that can be applied on a system-wide basis to selected program areas

- Sponsorship of an annual national VA conference on evaluation of patient health education

Veterans Administration
Health Education Case Studies

The following case studies give an overview of how a large centrally directe system can affect the coordination and implementation of health education services. The VA staff have worked hard to define the role and responsibilities to health education of the national, regional, district, an local levels. The following case studies outline the patient health educati activities of a CHEP (Cooperative Health Education Program), a medical district and a medical center.

VA Cooperative Health Education Program
Boise, Idaho

The Cooperative Health Education Program (CHEP) offers leadership and coordination for 16 hospitals and 20 nursing homes that provide institution-based patient health education to populations residing in a 10-county area in southwest Idaho and 2 counties in eastern Oregon. The CHE facilitates communication and sharing, attempts to prevent duplication of effort, and develops cooperative programming that enhance evaluation studies and possibly research in the area of patient health education. The CHEP als provides continuing education for health care staff who actually perform educational functions within the facilities.

CHEP resources include a meeting area, staff administrative assistance, and some funding as needed for educational programming, including communication and program design. One advantage of the CHEP is that it can serve as a neutral agency and thereby cross territorial lines to enhance cooperation an communication. CHEP staff consists of a director, an assistant director, a patient health education coordinator, who serves as a consultant to the individual institutions as requested, and a secretary.

CHEP relationship with hospitals

Hospitals relate to the CHEP as members of a non-profit corporation, the Are Health Education Consortium of Treasure Valley, Inc., established in Boise t facilitate education and training of health manpower in the area. Since its beginning in 1973, the corporation has been community-based and community-controlled. The 11 member board of directors includes representatives from Boise State University, various health professions, institutional administrators, and the VA. The governing board and stock holders comprise the corporation. No formal fee structure or membership fee exists. The VA provides some equipment, three professional staff members, a secretary and meeting facilities on the VA Center grounds. Hospitals assist

financially through payment of tuition fees for their staff members who attend CHEP programs. Aside from the 16 hospitals and 20 long-term-care facilities that are corporate members, support also is obtained, either directly or through in-kind services, from various community resources, such as:

- Ada County Continuing Medical Education Corsortium (MD's)
- Idaho Hospital Association
- Idaho Nurses Association
- Boise State University
- Ada County Council on Alcoholism
- Idaho County Lung Association
- Idaho Health Facilities (long term care organization)
- Idaho State Dept. of Health and Consumer Education (Health & Welfare)
- Idaho State Laboratory
- Idaho Commission on Nursing and Nursing Education
- American Diabetes Association, local chapter
- University of Washington-Seattle and various area colleges and universities.

Health education activities

CHEP programs are always co-sponsored with one or more facilities, agencies or institutions. These institutions have a variety of individuals who are assigned the responsibility for patient health education in their settings. The designated person may devote full time to educational activities, but more often the responsibility is shared with in-service training personnel, nurses, directors of nursing service, social workers, personnel directors, and other administrative staff.

Each voluntary facility health education representative has the support of his/her administration in serving on the CHEP Patient Education Committee which, with CHEP staff assistance, decides what educational programs will be developed. Decisions on programming are based on a needs assessment conducted at each facility in the community and through group consensus. Patient needs data are reflected by major diagnosis, specialties of the facilities, various internal reports and consumer demands. Currently, a grant is pending that would implement a formal, standard needs assessment instrument that could be applied or adopted by hospitals and long-term care institutions as a means for determining patient health education needs and appropriate plans for meeting those needs. From these individual plans, the consortium could plan more relevant educational programs for its constituents.

Health education activities currently being implemented by the CHEP include:

1. Partial funding for alcohol education in cooperation with the Ada County Council on Alcohol

2. Grant writing for support of a comprehensive needs analysis in four major Idaho hospitals

3. Continuing education programming for staff involved in patient education (systematic program design techniques, teaching skills and methods, health education on an institutional, programmatic and individual level, etc.).

Some innovative aspects of the consortium's health education activities include:

1. The ability (provided some type of additional funding is available) to develop or refine a reliable needs analysis tool that would yield individual hospital plans on which the CHEP could develop a consortium-wide plan. A data base that can serve as a measurement tool may be established in the future

2. The ability to assist in the development of rural health education that is hospital-based. The use of a tel-lecture system is an added possibility

3. The facilitation of patient health education activities in a cost-effective way especially for continuing education needs of the staff

4. The development of profiles of available resources obtained through networking efforts.

Coordination of activities

Direct involvement of consumers in the planning of health education activities at the CHEP level is limited. Occasionally, when the programs relate to subjects that involve "contracting" between patients and provider (such as prevention, wellness and health promotion), or when volunteers serve as part of the patient supporting group (such as in grief resolvement), a consumer component may be designed into the educational program, and a consumer patient education session may be held, sometimes on the evening prior to the regular program for hospital staff.

Funding and Evaluation of activities

The CHEP activities are financed primarily through in-kind services of its member institutions, some grant and consultation funds from the VA and other organizations, and tuition fees collected by those who attend the CHEP educational sessions.

Evaluation of the CHEP programs is performed through opinion surveys of the attendees. These remarks are used to design or modify future programs. A more stringent pre-and post-test evaluation has been applied to the gerontology programming over a year's span and a criteria base of deficiencies cited by licensing agencies has been used as a follow-up evaluation.

Major barriers

The major problems faced in planning and implementing the CHEP activities include:

- Insufficient time on the part of the various hospital staff to undertake educational activities
- Lack of coordination between inpatient, outpatient and community education that is facility-or hospital-based
- Lack of educational resources (no medical school or school of public health in the state of Idaho)
- Need for physician agreement and cooperation
- Preventing duplication yet continuing a healthy competitive spirit.

To overcome these problems, the CHEP staff and Patient Education Committees have:

- sought support from administration and recognition by the Idaho Hospital Association and the Association of Western Hospitals, as well as additional funding for staff to conduct projects
- encouraged the movement toward centralized "human resources departments" or "educational services" that coordinate activities
- worked with the Medical Education Consortium and received their support for the patient education grant application; worked with the facilities to solicit MD's as committee members
- established communication through meetings, committee participation and support by CHEP. There are enough educational needs for all organizations, agencies and institutions to participate without being duplicative. Again, the CHEP neutrality is valuable in facilitating this process.

Veterans Administration
Medical District 14 (Michigan)

Medical District 14 of the Veterans Administration encompasses the 68 counties in the Lower Peninsula of Michigan and twelve counties in Northwest Ohio. It serves approximately 1,258,000 veterans. The population served is predominantly male, aged 50-64 years (38 percent). There is a rapidly growing number of veterans over 65 years who now constitute about 10 percent of the patient population and whose ranks are expected to swell to 25 percent by 1990. For the District as a whole, alcohol addiction is the most frequently coded primary diagnosis (10 percent) recorded at discharge.

The mission of VA Medical District 14 is to provide a full range of health care services to the service-connected veteran and on a resource available basis to non-service connected veterans in the District. In addition, the Medical District has missions relating to education and research. The primary rationale for health care education and training activities is improved care for the veteran patient. Additionally, the district promotes the health of veteran beneficiaries through the provision of patient health education services. An index of services and training programs provided in VA Medical District 14 is listed in Appendix 1. Approximately 4100 full-time equivalent employees are employed in the District. Of these, about 708 are employed in ambulatory settings at the four medical centers and two satellite outpatient clinics. Services offered in these settings are listed in Appendix 2.

The Veterans Administration System represents an example of a prepaid, multihospital health care system that is using a regionalization approach for planning and allocation of resources. Personnel, facilities, and operating funds are allocated according to identified needs of geographically or organizationally affiliated clients. Under this optional concept, only those resources needed in each community would be provided, and services that are less frequently needed and more expensive to provide would be shared by various population subgroups.

The Medical District Centers

The Veterans Administration medical facilities that serve this Medical District are strategically located throughout the state and are affiliated to the extent possible with leading medical schools. Veterans Administration Medical Center Allen Park, located in a suburb of Detroit, has a major affiliation with Wayne State University's School of Medicine and provides primary, secondary and tertiary care to 600,700 veterans located in four counties, which represent approximately 50% of the state's veteran population.

This Center operates a total of 539 beds divided among medicine, surgery, psychiatry, neurology, dermatology and intermediate care and, in addition, a 72 bed nursing home care unit. As a referral and tertiary care center for Medical District 14, this medical center supports numerous professional services programs. Ambulatory care is provided through general medicine and

general surgery clinics and 35 speciality clinics at Allen Park. In addition, an Outpatient Drug Clinic is located in Detroit in the Herman Kiefer Health Complex. The Allen Park VAMC is highly committed to assuring the availability of comprehensive health care services to all veterans in its primary service area. Allen Park Veterans Administration Medical Center also provides acute inpatient care for veterans referred from Ann Arbor, Battle Creek, Saginaw and the Toledo Outpatient Clinic. Programs scheduled to begin in Fiscal Year 1982 include an Outpatient Alcohol Treatment Unit, a Dermatology Center, an Ambulatory Surgery Unit and a Neurological Diagnostic Center.

Veterans Administration Medical Center Ann Arbor, located in southeastern lower Michigan, has a major affiliation with the University of Michigan's School of Medicine and provides tertiary care to 50% of the total veteran population in the Medical District with primary and secondary care being provided to 423,946 veterans in 22 counties in Michigan and twelve counties in northwest Ohio. Primary care also is provided in northwest Ohio through a satellite outpatient clinic located in Toledo, Ohio.

The Ann Arbor Veterans Administration Medical Center operates a total of 368 beds divided among general medicine and surgery, psychiatry, neurology and dermatology. As a referral and tertiary care center for Medical District 14, this medical center supports numerous professional service programs. Ambulatory care is provided through a general medicine clinic and 25 specialty clinics at Ann Arbor Veterans Administration Medical Center and through the Toledo Outpatient Clinic (OPC) in Toledo, Ohio. The Toledo OPC provides primary care to approximately 165,000 veterans residing in 15 counties in northwestern Ohio and southeastern Michigan. This primary care clinic maintains a formalized referral system with the Ann Arbor Veterans Administration Medical Center to provide needed secondary or tertiary care.

The medical center's plans include an expansion of patient care capabilities to meet the needs of the aging veteran population. Such plans include a 120-bed nursing home care unit to be completed in Fiscal Year 1983. The Ann Arbor Veterans Administration Medical Center also has submitted a major proposal for the development of a Geriatric Research Education and Clinical Center.

Veterans Administration Medical Center Battle Creek is located in south central lower Michigan. This Center provides primary care to 247,000 veterans through its ambulatory and outpatient clinics and a satellite outpatient clinic located in Grand Rapids, Michigan. It provides acute psychiatric care, and provides long-term psychiatric care and extended medical care for Medical District 14.

The Battle Creek VA Medical Center serves approximately 90 percent of the veterans in the Lower Peninsula of Michigan who require long-term care. Although the medical center is predominantly a neuropsychiatric facility, auxiliary services are available that make it a well-rounded health care facility. The medical center's mission includes active inpatient, outpatient and residential care programs, as well as an integrated and comprehensive teaching program. Tertiary services not provided at this Center are available at the Ann Arbor Veterans Administration Medical Center.

The Battle Creek Veterans Administration Medical Center operates a total of 908 beds divided among psychiatry, general medicine and intermediate medical care and a 205 bed nursing home care unit. The medical center supports a number of professional service programs, which are provided on a referral basis to Medical District 14 as well as directly to Battle Creek patients. This Center operates a satellite outpatient clinic in Grand Rapids that provides primary care to 82,600 veterans residing in 15 counties in the western part of the Lower Peninsula of Michigan. Health care services not available on a direct basis by the clinic are provided on a contractual basis (laboratory and x-ray) or through a formalized referral process to Battle Creek VAMC and Ann Arbor VAMC.

The medical center's plans include a special ward program for the care and treatment of the chronically assaultive and violent patient, which is scheduled to bgin operations in Fiscal Year 1982 and would serve the needs of Medical District 14. Activation of a Day Treatment Center also is scheduled to open before Fiscal Year 1986. Extensive planning has been done to establish a work restoration unit that is part of the vocational rehabilitation program. Contracts have been made to establish halfway house contracts for alcohol and drug dependent veterans. This medical center is well suited to increase the number of nursing home care beds to meet the need ofthe aging veteran population.

Comprehensive programs are being developed to meet the needs of the changing veteran population. Specific programs focusing on the needs of geriatric and extended care patients include a horticultural program, a variety of physical therapy, occupational therapy and education therapy programs and a reality orientation program. In addition, committees dealing with geriatric care issues and issues of quality of life for extended care patients present seminars and special panels for staff education.

Veterans Administration Medical Center Saginaw, located in north central lower Michigan, provides primary and secondary care to 206,407 veterans in the 42 counties located in the upper half of the Lower Peninsula of Michigan. Services not provided at the Saginaw VA Medical Center are available at VAMCs in Ann Arbor (tertiary care) and Battle Creek (extended care-psychiatric, intermediate medical) as primary sources.

The Saginaw Veterans Administration Medical Center operates a total of 158 beds divided between general medicine and surgery. In support of the teaching component of its mission, the medical center participates in affiliations for optometry, nursing and allied health students. Training programs also have been established for administrative residents. A 30 bed Nursing Home Unit activated in Fiscal Year 1981 aids the medical center in its mission to meet the needs of the aging veteran population.

The Veterans Administration provides budgetary support for an Area Health Education Center in Saginaw, Michigan. (The VA calls the AHECs in the system, Cooperative Healthmanpower Education Programs or CHEPSs.)

The Area Health Education Center of East Central Michigan was incorporated as a non-profit corporation in the State of Michigan in 1972. The primary focus

of the corporation is to provide education and training programs to develop and maintain health care professionals in the 14 county East Central Michigan area. The purpose of the corporation is to develop, coordinate and utilize health education resources for meeting health manpower needs and thereby improve the quality and availability of health care.

The AHEC is managed by an Executive Director. In addition, the Area Health Education Center employes a full-time Patient Health Education Coordinator to provide technical assistance and consultation, in the area of patient and consumer health education, to 23 community hospitals located in the 14 county area served by the AHEC. This Patient Health Education Coordinator also provides management and coordination of the patient education activities in the VA Medical Center, Saginaw.

Also, using a cooperative approach involving a corsortium of five community hospitals in addition to the VA Medical Center in Saginaw, the AHEC sponsors a 12 month dietetic internship program which is accredited by the American Dietetic Association.

Responsibility for health education

The Medical District's mission for health education is to promote the health of veteran beneficiaries through the provision of patient health education services and to share program developments with the community at large.

In support of this mission, VA Medical District 14 established the following philosophical statements:

Effective patient health education will improve the quality of health care and quality of life.

The patient is an active partner of the health care team in determining his own care.

Patient health education is an integral part of patient treatment.

Patient health education should be provided by those who deliver direct patient care services.

Patient health education should be organized on a multidisciplinary basis to provide for the greatest coordination and least duplication of effort and resources.

Patient education programming should be coordinated at the institutional level by a person trained in education principles and methodology who is knowledgeable about health care delivery.

Each health care facility is responsible and accountable for conducting planned, evaluated patient education activities.

In addition, VA Medical District 14 established the following goals for the District Patient Health Education Unit:

GOAL 1 Development and implementation of policy and procedures to support the Patient Health Education Program in VA Medical District 14.

GOAL 2 Development and implementation of a mechanism for improving the management of patient health education at medical center levels.

GOAL 3 Development of short and long range goals for patient health education services at medical center levels.

GOAL 4 Development and implementation of staff education in patient health education for medical district employees to facilitate accomplishment of patient health education goals.

GOAL 5 Maintain and refine academic affiliations for health education interns to increase the pool of health education specialist.

GOAL 6 Refinement of the district training approach for Patient Health Education Coordinators involved in institutional planning for patient health education services.

In 1974, the VA Central Office of Policy and Planning, Washington, DC, established five VA District Patient Health Education Units in the VA system. Due to the difficulty of a single coordinator facilitating the activities to improve the coordination and quality of patient health education services in several medical centers at the same time, the Central Office of Academic Affairs converted all District Patient Health Education Units to the medical center level.

The District Executive Council comprised of Medical Center Directors in VA Medical District 14 endorsed full-time Patient Health Education Coordinators and secretarial support in each medical center. In addition, the District Executive Council requested the continuation of the district approach with a full-time District Patient Health Education Coordinator. The Central Office of Academic Affairs approved the continuation of the district approach if supported by hospital-based PHECs.

The District Patient Helth Education Coordinator is responsible for overall planning, organizing and directing of patient health education activities for the medical centers and clinics in VA Medical District 14. The coordinator provides professional leadership, consultation and technical assistance on all matters related to patient health education.

The medical center PHE Coordinators are administratively responsible for the implementation, coordination, and evaluation of all medical center-based patient health education activities. The PHEC provides professional leadership, advice, guidance, and authoritative consultations to all services in matters relating to patient health education. The PHEC is responsible for institutional planning and long range goals for patient health education services.

The primary role and functions of the District Patient Health Education Coordinator are as follows:

Consult and participate with health care facilities to insure an effective (institutional) Patient Health Education Program is implemented and its operation is of high quality.

Enhance and strengthen the coordination and development of quality patient health education activities in each medical center.

Consult and provide staff development related to assessment of needs, planning, implementation, and evaluation of patient health education activities.

Collaborate and consult with national, state, county and community organizations, government or private, concerning the need for quality patient health education programs and resources.

Consult and participate with voluntary and private organizations, colleges and universities, regarding research, training and staff development to improve the quality of patient health education activities. This role includes the development of affiliations between VA Medical District 14 and academic centers that provide expertise and professional training in the area related to health education.

Coordination of health education programs

The District Patient Health Education Coordinator reports directly to the Medical District Director and performs with a wide range of duties concerning patient health education throughout the medical district with general direction provided by the National Coordinator for Patient Education as well as program guidelines and professional consultation from the regional and medical center PHE Coordinators. In addition, the District PHEC receives guidance from the District Executive Council and the District Education Committee.

At the medical center level, the Chief of Staff acts as full assistant to the Director in the direction and coordination of the educational activities of the medical center. In three of the VA Medical District 14 Medical Centers, an Associate Chief of Staff for Education is appointed and assigned responsibilities for funds related to continuing education activities, supervision of learning resources (library, medical media, closed-circuit television), continuing education and inservice education programming, affiliations activities, and patient health education programming.

The PHECs in VAMCs Allen Park, Ann Arbor and Battle Creek are each under the direct supervision of the Associate Chief of Staff for Education (ACOS/E). If the ACOS/E position is vacant, the PHEC is directly responsible to the Chief of Staff. With the approval of the ACOS/E, the PHEC attends to institutional programming and staff development in an independent manner. Priorities and projects are initiated on the basis of organizational need.

The PHEC in VAMC Saginaw is under the direct supervision of the Executive Director of the Cooperative Healthmanpower Education Program (CHEP). If the

Executive Director position is vacant, the PHEC is directly responsible to the Director.

The district and medical center PHECs may provide or receive technical assistance and consultation from the National Coordinator for Patient Education, Mid-Atlantic Regional Medical Education Center, PHEC, or from other medical center-based PHECs in the VA System.

Planning, implementation and evaluation

The VA Medical District was established to coordinate planning and services among the separate medical centers, and to encourage appropriate distribution and sharing of resources within the geographical area. The administrative structure of the medical district is composed of a District Director, the District Executive Council, various sub-councils and district committees as deemed necessary.

The District PHEC is given assistance for long range planning by the medical center PHECs, District Education Committee, and the District Executive Council.

At the medical center levels the planning activities vary. At Allen Park, this responsibility is shared by the PHEC and a Patient Education Committee, which includes an audiologist, occupational therapist, librarian, dietitian, pharmacist, nurse, dentist, physician, social worker and physician assistant.

At Ann Arbor, the PHEC is responsible for institutional planning of PHE activities. Others responsible for program planning and evaluation are either authorized target population planning committees or individuals who have been charged by their supervisors or who take it upon themselves to design programs.

At Battle Creek, institutional planning is the responsibility of the PHEC who is assisted by the Patient Education Policy Committee, and by subcommittees on specific health problems. Implementation is the responsibility of the Ward Treatment Teams. Evaluation is conducted by the PHEC assisted by the Associate Chief of Staff for Education and the Hospital Service Review Organization Coordinator.

At Saginaw, policy and institutional planning is the responsibility of the PHEC and the chiefs of service for nursing, dietetics, pharmacy, dentistry, library, and social work. In addition, consultation is often requested from medicine, surgery, and medical administration service. Implementation is overseen by the PHEC in cooperation with Patient Education Ward Coordinators. Evaluation is conducted by the PHEC in collaboration with planning committee and patient education ward coordinators.

In all medical centers the direct care-givers are responsible for implementation of patient education interventions and for documentation in the medical record.

In general, patient health education programming is based on an institutional needs assessment and an analysis of that assessment to determine priorities.

Once priorities have been established, the PHEC focuses medical center resources on the established priorities.

Methods of evaluation used to assess the health education activities by the centers include: chart audits, participant counts (number of patients instructed), reactionary evaluations, patient assessments, return demonstrations, and follow-up telephone interviews. Ann Arbor divides evaluation into three categories: Process evaluation, including systematic observation, record reviews, etc.; Impact Evaluation, including achievement of patient learning objectives as determined subjectively by professional staff or objectively by specifically-designed instruments; Outcome Evaluation, including record review and patient interviews to determine the achievement of health outcome (i.e., diabetic maintenance, decrease in diabetes complications, decrease BP, etc.)

Health education programs

There are many informal patient educationactivities being implemented in VA Medical District 14. Some of these activities are planned, most are neither planned or evaluated. Table 1 shows the patient education programs that have been planned and are implemented in the medical centers and/or satellite clinics. In general, most of the programs are multidisciplinary in their delivery.

A special feature of the health education activities at VAMC Allen Park has been the development of a patient-oriented newsletter published quarterly on general health-related topics. Another unique aspect of the patient education activities is the use of a health education bulletin board.

Target population planning for patients with mental health problems is a special task of the Battle Creek VA. The Saginaw VA identifies the Patient Education Ward Coordinators as a mecahnism to improve the quality and coordination of patient education activities. The Patient Education Ward Coordinator Committee represents the implementation arm of the patient education activities and is a communication network and link between implementation, planning, and policy. This committee provides feedback on the progress and problems of patient education at the case level.

*AP = Allen Park
AA = Ann Arbor
BC = Battle Creek
SG = Saginaw

TABLE 1

HEALTH EDUCATION PROGRAMS

PROGRAM AREA	MEDICAL CENTERS			
	*AP	AA	BC	S
Abdominal - Pre and Post Operative				X
Alcohol		X	X	X
Assertiveness Skills			X	
Cancer - Patient Support		X		
Communication Seminar			X	
Dental			X	
Diabetes	X	X	X	X
Epilepsy			X	
Gastrointestinal - Ulcers				X
Heart - Hypertension	X	X	X	X
Heart - Pre and Post Operative		X		
Heart - Catheterization		X		
Heart - Stroke			X	
Heart - Prevention			X	
Job Workshop			X	
Loneliness & Depression			X	
Medication			X	
Nutrition - Basic			X	X
Nutrition - Wt. Reduction		X	X	X
Nutrition - No Salt Added				X

PROGRAM AREA	MEDICAL CENTERS			
	AP	AA	BC	S
Preparation for Radiology Procedures			X	
Pre-community Care			X	
Pre-Prosthetic Counselling	X			
Psoriasis	X			
Reality Orientation			X	
Re-motivation			X	
Renal - In-center		X		
Renal - Orientation		X		
Renal - Home Training		X		
Respiratory - Chronic Obstructive Pulmonary Disease (COPD)				X
Respiratory - Tuberculosis	X			
Schizophrenia			X	
Smoking		X		
Stress			X	
Vascular Conditions		X		

Community Involvement

To foster consumer involvement at the District level, representatives from the Veterans organizations attend the District Executive Council meetings. In addition, there are full-time patient representatives employed by VAMCs Allen Park and Ann Arbor. The PHEC in Allen Park encourages consumer involvement in the planning of health education activities through the use of questionnaires and individual patient interviews. The planning groups in Ann Arbor have invited contributions from patients during the program development phase as well as the pilot testing phase. Consumers have been used as faculty and in this capacity have provided input for program design. The Battle Creek VA uses feedback from the patient through the ward staff and Patient Satisfaction Surveys to improve their program designs. The Saginaw VA includes an evaluation instrument in the patient handbook. In addition, the PHEC collaborates with the Chief of Voluntary Service and the Community Affairs Representative for feedback on needs and interests of consumers, and uses a formal needs assessment of patients and staff which is conducted periodically.

A variety of community resources are used by the medical centers in support of health education programs. In general, the medical centers have been involved with the following community resources: Visiting Nurses Association, Michigan Diary Council, Michigan Cancer Foundation, American Cancer Society, Michigan Health Association, Michigan Diabetic association, American Lung Association, Epilspsy Foundation, Arthritis Foundation, County and Michigan Health Department, and Michigan Hospital Association.

VA Medical District 14 is affiliated with Community Health Education Programs (master level) at the University of Michigan School of Public Health, University of California-Berkeley School of Public Health and Central Michigan University.

The District PHEC through a faculty appointment with the University of Michigan School of Public Health, actively participates in the teaching of a graduate level course in patient education. The District Coordinator is a member of the Michigan Hospital Association/Office of Health and Medical Affairs Ad Hoc Committee on Patient Education, participated in MHA/OHMA PE Consensus Conference to develop a screening tool to determine the varying levels of PE program development (selected target populations) in the State of Michigan, and conducted a statewide survey to obtain information concerning role and functions of inpatient education coordinators. This survey was sponsored by the Michigan Society for Healthcare Education and Training.

Barriers to health education

The resources for patient education are similar to those for other patient care activities. The salaries for clinicians and direct care givers providing patient education are allocated from the control points and budgets of individual services. Materials, excluding audiovisual, are often supported by individual clinical services. In addition, materials and media are budgeted in the Library, Media Production, and Education Services. There are community

resources that are loaned on request through each Library Service. Other resources include office space and space for education purposes, funds for technical assistance, consultation, and continuing education.

A major impact on the resources described above is the lack of coordination which results in duplication of purchase.

Major problems in the delivery of PE programs are: competing appointments (i.e., lab and x-ray) of inpatients; travel distance between home and medical center for outpatients; difficulty with supporting staff to educate patients on a long-term basis until outcome has been achieved and to reinforce behavior change.

Many of the barriers relate to resolving system problems (policies and procedures), establishing continuing education activities, or managing resources to obtain the expected outcomes.

APPENDIX 1

INDEX OF SERVICES PROVIDED IN MEDICAL DISTRICT 14

AA = Ann Arbor

AP = Allen Park

BC = Battle Creek

SG = Saginaw

Program	VAMC
Acute Stroke Care Unit	AA, AP
Alcohol dependency Treatment Unit	AA, AP, BC
Alcohol Detoxification Unit	AA, BC SG
Allergy	AP, AP
Anesthesiology	AA, AP, SG
Audiology	
Cardiac Care (Intensive) Unit	AA, AP
Cardiac Catheterization Laboratory	AA, AP
Cardiac Surgery Center	AA
Cardiology	AA, AP
Cardiopulmonary Rehabilitation Center	AA, AP
Compensated Work Therapy Program	BC
Computerized Axial Tomography Unit	AA
Contract Nursing Home	AA, AP, BC, SG
Corrective Therapy	BC
Day Treatment Center	AP

Program	VAMC
Dermatology	AA, AP, BC, SG
Driver Training Program for the Handicapped	AP
Drug Dependency Treatment Unit	AP, BC
Education Therapy	BC
Electron Microscopy	AA, AP
Endocrinology	AA, AP, SG
Gastroenterology	AA, AP, SG
General Dentistry	AA, AP, BC, SG
General Medicine (Internal)	AA, AP, BC, SG
General Surgery	AA, AP, SG
Halfway House (Substance Abuse)	AP, BC
Hematology	AA, AP, SG
Hemodialysis	AA, AP
Home Hemodialysis Training Unit	AA, AP
Hospital-Based Home Care	AA, AP
Hypertension Screening and Treatment Program	AA, AP, BC, SG
Immunology	AA, AP
Incentive Therapy (Horticultural Therapy)	BC
Infectious Diseases	AA, AP SG
Intermediate Care	AP, BC
Manual Arts Therapy	BC
Medical Intensive Care Unit	AA, AP, BC, SG

Program	VAMC
Medical Media Production Service	AA, AP, BC
Mental Hygiene Clinic	AA, AP, BC
Music Therapy	BC
Nephrology	AA, AP
Neurology	AA, AP
Neuropsychological Testing	AA, AP, BC
Neurosurgery	AA
Nuclear Medicine Unit	AA, AP
Nursing Home Care Unit	AP, BC, SG
Occupational Therapy	AA, AP, BC, SG
Oncology	AA, AP
Ophthalmology	AA, AP, BC, SG
Optometry	AP, BC, SG
Oral Surgery	AA, AP, BC, SG
Orthopedic Surgery	AA, AP, SG
Orthotic Shop	AP
Otorhinolaryngology	AA, AP
Pathology	AA, AP, BC, SG
Patient Health Education	AA, AP, BC, SG
Pharmacy	AA, AP, BC, SG
Physical Therapy	AA, AP, BC, SG
Plastic Surgery	AA, AP
Podiatry	AP, BC, SG

Program	VAMC
Prosthetic and Sensory Aid Service	AA, AP, BC
Prosthetic Treatment Center	AA, AP
Psychiatry	AA, AP, BC
Psychology	AA, AP, BC, SG
Pulmonary Disease	AA, AP, SG
Pulmonary Function Laboratory	AA, AP, SG
Radiology	AA, AP, BC, SG
Recreation Therapy	AA, AP, BC, SG
Rehabilitation Medicine	AA, AP, BC, SG
Residential Care	AP, BC, SG
Respiratory Care Center	AA, AP, SG
Rheumatology	AA, AP, SG
Sickle Cell Screening Program	AA, AP
Special Reference Laboratory	AA, SG
Speech Pathology Unit	AA, AP, BC
Supervoltage Therapy Unit	AP
Surgical Intensive Care Unit	AA, AP, SG
Thoracic Surgery	AA, AP, SG
Urological Surgery	AA, AP, SG
Vascular Surgery	AA, AP, SG
Vocational Rehabilitation	AA, BC

AFFILIATIONS

CLINICAL TRAINING PROGRAMS	VAMC
Allergy	AA, AP
Anesthesiology	AA, AP
Cardiology	AA, AP
Dermatology	AA, AP
Endocrinology	AA, AP
Gastroenterology	AA, AP
General Internal Medicine	AA, AP
General Surgery	AA, AP
Hematology	AA, AP
Infectious Disease	AA, AP
Neurological Surgery	AA
Nephrology	AA, AP
Neurology	AA, AP
Oncology	AA, AP
Ophthalmology	AA, AP
Oral Surgery/General Dentistry	AA, AP
Orthopedic Surgery	AA, AP
Otology	AA, AP
Otorhinolaryngology	AA, AP
Pathology	AA, AP
Plastic Surgery	AA, AP

CLINICAL TRAINING PROGRAMS	VAMC
Podiatry	BC
Pulmonary Diseases	AA, AP
Psychiatry	AA, AP
Radiology	AA, AP
Rheumatology	AA, AP
Thoracic Surgery	AA, AP
Urological Surgery	AA, AP
Administrative Training Program	
Hospital Administration Resident	AA, AP, SG
Hospital Administraton Externs	AA
Other Training Programs	
Audiology and Speech Pathology	AA, AP, BC
Biomedical Equipment Technology	AP
Chaplain Service	AP
Dental Assistant	AA, AP, SG
Dental Hygiene	AP, BC
Dental Laboratory Technician	AP, BC
Dietetic	AA, AP
Drug rehabilitation Counselor	AP
Experimental Education	AP
Horticulatural Therapy	BC
Hospital Librarian	AP, BC
Health Services Research & Development	AA

CLINICAL TRAINING PROGRAMS	VAMC
Manual Arts Therapy	BC
Medical Records Administration	AA, AP
Mental Health Associate	BC
Music Therapy	BC
Nuclear Medicine	AA, AP
Nurse Anesthestist	AA, AP
Nursing	AA, AP, BC, SG
Occupational Therapy	AA, AP, BC
Optometry	SG
Community Health Education	AA, AP, BC, SG
Pharmacy	AA, AP, BC
Physician Assistant	AA, AP, BC
Physical Therapy	AA, AP, BC, SG
Psychology	AA, AP, BC, SG
Radiology Technology	AA
Recreation Therapy	AA, AP, BC
Respiratory therapy	AA, AP
Social Work	AA, AP, BC, SG

Other Training Programs	
Administrative Assistant to Chief of Staff	AA, AP
Assistant Director	AA, AP
Management Analyst	AA, AP

APPENDIX 2

OUTPATIENT CLINICS AND AMBULATORY CARE IN VA MEDICAL DISTRICT 14

Anti-coagulant Management
Audiology
General Surgery
Neurological Surgery
Neurology Behavior
Optometry
Opthalthamology
Oncology
Orthopedics
Occupational Therapy
Physical Therapy
Plastic Surgery
Podiatry
Peripheral Vascular Surger
Psychology
Proctology
Rehabilitative Medicine Services
Social Services
Urology

Allergy
Arthritis
Alcohol Treatment
Cardiology
Cardio-Thoracic Surgery
Dietetics
Dental
Dermatology
ENT
General Medicine
GI
Hematology
Hypertension
Infectious Diseases
Mental Health
Medicine-Thoracic
Neurology
Psychiatry
Speech Pathology

Agent Orange Clinic
Endrocrinology & Metabolism
Prosthetics
Renal

Veterans Administration Medical Center
Buffalo, New York

The Buffalo Veterans Administration Medical Center (VAMC) serves approximately 242,000 veterans in Buffalo's primary service area. Buffalo, combined with VA Medical Centers in Albany, Batavia, Bath, Canandaigua, and Syracuse, delivers health service to a veteran population of approximately 904,000 residing in VA Medical District 2.

The veteran population is heavily weighted with men aged 50-64 years, due to the large number of World War II veterans. Western New York includes both urban and rural areas, and has a rich cultural mix.

The medical center

The Buffalo Veterans Administration Medical Center is located approximately six miles from downtown Buffalo on a 17-acre tract of land in the northern sector of the city. This general hospital was constructed by the VA in 1950 and an ambulatory care addition was completed in 1979. The facility has a total bed capacity of 849 hospital beds (134 psychiatry, 72 intermediate, 366 medicine, 35 neurology, 35 rehabilitation medicine, and 207 surgery) and 36 nursing home care beds. The hospital is affiliated with the adjacent State University of New York (Buffalo) School of Medicine.

The Buffalo VA employs approximately 1,700 people. Specialized medical programs here include: Alcohol Treatment, Cardiac Catheterization, Drug Dependence Unit, Hemodialysis Center, Home Dialysis Training, Hospital Based Home Care, Nuclear Medicine Unit, Prosthetic Treatment Center, Pulmonary Function Lab, Respiratory Care Center, and Speech Pathology.

The Buffalo VAMC has 40 outpatient clinics, staffed by 10 full time physicians, 5 part-time physicians, and a number of attendings, residents, interns, clinical nurse specialists, etc. The General Medical Clinic, for example, consists of 16 university residents and 6 ward physicians, each of whom is in the clinic three hours a week, in addition to the full-time ambulatory care physicians. Last year Buffalo VA scheduled 156,300 outpatient visits.

Responsibility for health education

The Patient Health Education Coordinator (PHEC) is responsible for the overall guidance, coordination, development, and evaluation of the medical center Patient Health Education Program. This includes the identification of patient health education and corresponding staff development needs, the planning of patient education activities and program evaluation. As stated in the PHEC job description, the coordinator:

a. develops goals and philosophy statements for the patient health education function, and recommends appropriate policies and procedures regarding patient health education at the medical center

b. diagnoses organizational needs, identifies internal and external resources, and establishes priorities for health education programs based on identified needs and resources

c. is responsible for program management, including: preparing a budget, monitoring expenses, and analyzing costs of patient health education activities; developing specific program goals, objectives, and content; ensuring the implementation, evaluation, and revision of each program

d. consults with appropriate clinical and administrative services, helping to train their staff for the provision of patient health education.

e. conducts educational programs for medical center staff who are responsible for patient health education programs, and provides consultation regarding problem-solving, program planning, evaluation, and research

f. provides technical guidance and direction in the selection of effective and appropriate educational/behavioral strategies, assessment and evaluation criteria, and documentation design

g. provides technical guidance and direction in the preparation, development, pretesting, and utilization of patient health education materials and audiovisual programs

h. chairs the Medical Center Patient Health Education Committee and serves as an educational process consultant to subcommittees (convened to develop and implement specific programs). The coordinator represents the interests of patient health education at all medical center meetings

i. continually reviews and interprets research related to patient health education; he/she integrates these data into ongoing programs and future planning. The coordinator conducts and monitors evaluation activities examining the impact of educational efforts, and assists with the development of audit procedures pertinent to process mechanisms and patient outcomes. He/she analyzes evaluation data to provide feedback to all those involved in patient health education

j. functions as a preceptor and provides a training site for students who have a special interest and/or academic preparation in health education

k. works with outside consultants as necessary to achieve project goals. Where appropriate, the coordinator participates in cooperative efforts with other VA facilities, community organizations and academic institutions to promote quality patient health education activities.

Many of the clinical nurse specialists involved in inpatient care are also involved in the outpatient clinics and are able to follow up on patient education. In addition, plans have begun for coordination of inpatient educational efforts with the Home Based Hospital Care program, and with the Community Health Nurse.

Planning, implementation and evaluation of health education

Responsibilities for the planning, review, approval and evaluation of health education activities are shared by a variety of individuals and groups depending on the level of programming being addressed, i.e., whether it is at the institutional, service, or program level. The Patient Health Education Committee, including representatives from Medicine, Nursing, Dentistry, Library, Psychology, Social Work, Dietetics, and Medical Records, is responsible for planning and evaluating institutional health education programs. Planning and development of specific programs are usually done through multi-disciplinary groups of health care professionals, generally who are involved in implementation as well. Service chiefs are involved in the planning of programs that affect their services and also have responsibility in the evaluation phases.

Health education activities at the BVAMC have been developed based upon evidence of needs and are approved by both the service chiefs and the patient Education Committee. Proposals may be initiated by members of the health care team and approved by service chiefs before going before the Patient Education Committee for approval. In other cases, the Patient Education Committee may determine health education needs and recommend that specific services develop programs. Service chiefs also might identify needs for their staff and recommend that specific programs be developed.

Individuals involved in the review and approval of health education activities include members of the Patient Education Committee, including the Patient Health Education Coordinator, and representatives from Medicine, Nursing, Psychology, Dentistry, Social Work, Dietetics, Library, Office of the Chief of Staff Medical Records; Department of Health Education at SUNY/Buffalo; Office of Medical Education at SUNY/Buffalo; and a consumer representative. Additionally, service chiefs are involved in the review and approval process. Approval also must be given by the Education Committee, and the Clinical Executive Board.

To date, evaluation has been informal and based primarily on observation of patient skills and behavior following educational efforts. Many patients are followed up in outpatient clinics where their progress in self management skills can be followed. In addition, pre-and post-tests are used in some programs to evaluate learning. A research project currently is underway in the hospital which includes a component that will evaluate patient education.

Health education activities

Patient education activities and resources currently in progress at the Buffalo VA Medical Center are divided into the following categories: 1) patient health education, 2) occupational/vocational education, 3) recreational/general education, 4) audiovisual resources and 5) library materials.

Health education activities refer to those that provide the patient with specific medical information concerning prevention of diseases, restoration and maintenance of good health, and patient rehabilitation. The activities designed to provide the patient with information related to employment are categorized as occupational/vocational education. Recreational/general education includes such topics as current events, business management, arts, and items relating to veterans' activities.

For this report, the patient education activities were grouped into structural categories under the main headings listed above; These are 1) formal, 2) modified, and 3) incidental. Formal activities are those programs that have structured curriculum for specific audiences. Modified programs do not have a structured format; instead they provide instructional material directed more toward individual patients' needs. These include such activities as exercises and self-instruction at home. The incidental activities are very informal, and range from bedside discussions with the patient to the taping of group discussions for feedback on verbal and nonverbal behavior. Collections of pamphlets also are included in this group. Table 1 provides a summary of all patient education programs for each of the five main categories and the three structural categories. Appendix 1 gives a specific listing of the subject areas covered by the educational activities under each category.

Patient health education. Currently, there are 17 formal patient education programs being conducted in the following services: Dietetics, Nursing, and Social Work. Formal education programs in Medicine and Surgery are offered in conjunction with Nursing Service. In addition, Social Work Service is developing a formal program guide designed to inform the family of program focus and services offered.

Table 1

Numerical Summary of Patient Education Programs

	Formal	Modified	Incidental	Total
Patient Health Education	17	55	107	179
Occupational/Vocational Education	2	2	0	4
Recreational/General Education	0	2	0	2
Media				
Patient Educational	0	0	76	76
Occupational/Vocational	0	0	0	0
Recreational/General	0	0	250	250
Library Materials				
Patient Health Education	0	0	217	217
Occupational/Vocational	0	0	62	62
Recreational/General	0	0	8000	8000
TOTALS	19	59	8712	8790

At the present time, there are 55 modified programs in the hospital, of which Nursing Service accounts for the majority. Dentistry, Pharmacy, Rehabilitation Medicine and Social Work Services also provide this type of program. Modified education programs in Medicine and Surgery are offered in conjunction with Nursing Service.

There are 107 incidental patient education programs in the following hospital services: Audiology and Speech Pathology, Dentistry, Nuclear Medicine, Nursing, Pharmacy, Social Work. Programs of this type in Medicine and Surgery are offered in conjunction with Nursing Service.

Occupational/vocational education. Currently, there are very few occupational/vocational education activities in the medical center. There are two formal programs; one is in Rehabilitation Medicine Service and another is in Psychology Service. Psychology and the Psychiatric Service are responsible for the only two modified programs of this type. At the present time, there are no incidental occupational/vocational programs.

Recreational/general education. The recreational/general interest education activities are very limited. There are no formal or incidental patient education programs in any of the services. Psychiatry has two modified programs of this type.

Medical Media Programs. There are 76 audiovisual resources for patient health education within the following services: Dietetics, Nursing, Psychiatry, Rehabilitation Medicine, Medical Media, and the Library. No materials are available at this time for occupational/vocational education. For recreational/general interest education, there are 250 programs available in Medical Media and Library Service.

Library materials. The Medical Center library holds 217 books, magazines, journals, audiocassettes and pamphlets relevant to patient health education (See Appendix 2). The Patient Library has 62 books and journals available in occupational/vocational education, and approximately 8,000 books, journals and audiocassettes related to recreational/general interest education.

Patient health education programs currently in the planning stages include: Smoking Education Program, Behavior Modification Weight Control Program; Family Education for Schizophrenia Patients; Cardiac Nutrition and Sodium Restricted Diet. Many of the Buffalo VA's patient education programs are unusual in that they are developed by multidisciplinary teams. The developing focus of the programs is on behavioral rather than on purely informational outcomes.

Coordination of activities

A consumer representative is on the Patient Education Committee and is actively involved in the planning of patient education activities. In addition, a survey of patients in the medical center has been used to solicit

suggestions for patient education programs. Currently, participants in some of the formal education programs are being surveyed to determine needs not met, in order to incorporate additional material in future programs.

Major barriers

Funding is not a problem in that patient health education programs are included in the general hospital budget for patient care. Separate budgets currently are being developed for the office of the Patient Health Education Coordinator and for patient health education materials in the Patient Library. Funding for the position of the Patient Health Education Coordinator comes from V.A. Central Office in Washington, D.C..

Some of the major problems encountered in planning and developing health education programs include: establishing patient education as a priority in light of time constraints placed on staff; training staff to assess, develop, implement, and evaluate health education programs; and assuring multidisciplinary involvement, including physicians, in the educational processes. One strategy that seems to be helpful is to work with and gain support from those who are currently actively involved in patient education; their enthusiasm helps to encourage others to incorporate patient education as part of the clinical care process.

Appendix 1

Patient Health Education Programs

Formal programs

Dietetic Service
- Alcohol Rehabilitation - Normal Nutrition Class

Nursing Medical and Surgical Services
Individual counseling on:

Angiography	Stroke education
Pre-op	Amputee education
Pre-op/open heart	Hemodialysis
Video/radical neck	Cardiac rehab.
Amputee care/rehab.	X-ray prep.
P.V.D. - pre/post op	Diabetes
Colostomy care	

Rehabilitation Medicine Service
- Stroke/group meeting with patient and family related to discharge planning.

Modified programs

Dental Services
- all indicated patients treated by the Dental Service will receive an individual course of preventative dental instruction.
- long term patients, where feasible and/or interested, will receive yearly preventative dentistry re-instruction.
- oral hygiene instruction will be an integral part of diabetic training activities.

Dietetic Service
- Dietetics for renal patients

Nursing Medical Service
Individual counseling on:

Angiography	Cast care
Hiatus hernia	Care of sprains
Ba enema	Post-Op cataracts
Cardiac cath.	Respiratory care
Med. aspects alcoholism	Diabetes
Nut. seminars	Chemotherapy

Alcohol ed. for family	Home Mgmt. of tracheostomy patient
Pre-op	Angiography
Respiratory care	Diabetes
Care of amputee	Relaxation therapy

Pharmacy Service

Patients are counseled about medications at the bedside and at the outpatient dispensing desk.

Psychiatric Service

- Seminars on medication and nutrition
- Relaxation therapy, behavioral improvement and instruction on functioning in the community.
- Seminar on the effects of alcohol on the body

Rehabilitation Medicine Service

- Active exercises for rheumatoid arthritis
- Activities for amputees
- Activities of daily living, with home follow-up
- Buerger's exercises
- Fourteen-step program for cardiac patients
- Frenkel's exercises for coordination
- Home exercise program for CVAs and arthritis
- Home management for the hemiplegic, paraplegic, and guedraplegic
- Home management of arthritis by various methods of heat
- Home program for diabetics
- Home program for pulmonary patients
- Home exercise for hip, knee, ankle, toes, shoulder, elbow, wrist and fingers
- Home instruction and exercise for spondylosis
- Postural training
- Program for relaxation therapy
- Transfer and ambulation techniques
- Williams' exercises for low back pain

Social Work Service

- Interviews concerning finances, employment, and referrals to community agencies for the following types of patients: laryngectomy, mastectomy, colostomy, orthopedic, blind, general surgery and COPD

- Counseling the family of the following types of patients: stroke, amputee, cancer, cardiology and dialysis
- Counseling and discharge planning, pre-and post-op, for open heart patients
- Orientation and group discussion in the Drug Dependence Treatment Unit and Alcohol Treatment Unit

Incidental Programs

Audiology and Speech Pathology
- General pamphlets
- Information provided for patients in discussions with the speech pathologist.

Dietetic Service
- Various diets for particular groups

Laboratory Service
- Discussions with patients on an informal basis at bedside or in the lab

Nuclear Medicine
- General pamphlets
- Technologist explains procedures to the patient

Nursing and Medical Services
Individual counseling on:

- Post-op cataracts
- 24-hour urine collection
- Colostomy care
- Cystitis
- Hypertension
- Respiratory care
- Diabetes
- Proctoscopy
- Una boots
- Prolixin
- Immunization Tx
- Head/neck trauma
- Care of sprains
- Angiography
- Burn management
- Hernia -
- Low back pain
- Gall bladder series
- Chemotherapy
-
- Diet fluid related to renal failure
-
-

Suture care
Orientation for new patients
Post-op procedures following TUR
Chronic prostatitis

Pre-op procedures
Ba enema
Reality orientation
Bowel and bladder training
Oral care
Organic brain syndrome
Medications and effects
Patient government
UD
Fractured hip
CVD
ASHD
CHF

Radiation therapy

COPD
Oncology

Pharmacy Service

- Some general pamphlets are available

Psychiatric Service

- Instruction on ward and hospital policies
- Effects of medication
- Effects of alcohol on the illness and on other medications
- Effects of drug abuse on body and behavior
- Limitations and consequences of the patient's emotional illness
- Videotaping of groups for immediate patient feedback of verbal/nonverbal behavior
- Individual instruction regarding treatment plan
- Behavior patterns
- Medications and their side effects

Occupational and Vocational Education Programs

Formal programs

Psychology

- Preparation for the High School Equivalency Test

Rehabilitation Medicine Service

- Handicapped driver training

Modified programs

Psychiatric Service

- Use of community resources

Psychology

- Job-seeking skills; group discussion with day hospital patients

Recreational/General Interest Programs

Modified Programs

Psychiatry:

- Various weekly (or more often) group discussions on topics such as current events, art, business management, veterans rights, etc.

- Library hour conducted weekly, led by V.A. librarian, to orient patients to the library, literature available, and provide readings on matters of interest to patients.

Incidental programs

Dietetic Service
- Surgical cardiac patients -- dietetics

Audiovisual cassette titles available:

- Oral Hygiene for Total Patient Care
- Quitting: Tips for Smokers
- The Elusive Enemy
- Diabetes Mellitus
- Diabetic Diet
- Dental Self Evaluation
- Smoking: Past & Present
- Tooth or Consequences
- Three Times a Day
- Boozers and Users
- A Matter of Life & Breath
- Medical Aspects of alcohol
- Return to Reality
- Your Kidneys
- Peripheral Vascular Disease
- The Opening Door
- The Morning After
- Strokes
- Do you Have Questions About Cardiac Surgery? (2 parts)
- Administration of Insulin
- Foot Care for the Diabetic
- Urine Testing for the Diabetic
- Pre-operative Pulmonary Testing
- Matter of Chance (Sickle Cell Program)
- Exercise and Diabetes
- Insulin Shock and Diabetic Coma
- Chronic Complication's of Their Uses
- Dental Care for the Diabetic
- Diet Management: The Exchange Program
- Intermittent Self-Catherization for Men

Nursing Service: see above listing

Psychiatric Service:
- paraplegic patient education programs
- strokes

Recreational/general education programs

Library Services: The Patient Library has an extensive listing of recreational/general interest, occupational/education, and patient health education materials. The medical library has several resources to assist staff in implementing patient education. They include books by Arlene McGrory, Barbara Redman, Frances Storlie, Karen Zander and manuals and books published by the American Hospital Association. A variety of AV aids, catalogs and directories also are available.

OVERVIEW
U.S. Navy
Health Education Programs

The U.S. Navy provides medical services within 23 regional medical centers, 8 naval hospitals, and 153 clinics associated with the larger, regional facilities. There also exists a clinic aboard each of about 250 naval ships afloat. Outside of the U. S., the Navy Medical Department operates 8 naval hospitals and 8 clinics. During 1979, a total of 193,997 persons were admitted to navy medical treatment facilities. There were 13,190,616 outpatient visits to these facilities. Services are provided to an active duty Navy and Marine population of approximately 720,000 and a retired and dependent population of about 2,800,000. Most of the patients seen in these facilities are between the ages of 18-25.

Organizational overview, purpose and mission.

From its very beginnings, the U.S. Navy Medical Department has recognized the importance of patient education. Using a broad definition of patient health education, Navy physicians, nurses, and other health care professionals have instructed patients, primarily on a one-to-one basis, on improving personal health status. In addition, considerable group education has been carried out by the Dental and the Occupational Preventative Medicine Divisions of the Navy. The responsibility for these functions has been assumed as an integral part of health care delivery and, therefore, a formal, structured program recently has been established.

On December 21, 1976, the Surgeon General directed each Naval Regional Medical Center (NRMC)/Naval Hospital (NH) commanding officer to establish a health care consumer's council and a patient education program. On July 25, 1977, a Patient Education Group was established to "examine current patient education programs that currently exist and are in use at Navy medical treatment facilities" and "investigate such programs as they exist in other government agencies and the civilian sector."

Simultaneously, the Department of Defense expressed interest in patient information/patient education programs in all the armed forces. Immediately after the Surgeon General appointed a Patient Education Group within the Bureau of Medicine (BUMED), the Assistant Secretary of Defense for Health Affairs (ASD/HA) promulgated the Consumer Health Education Service-Wide Survey, which was distributed to all NRMC/NHs on September 19, 1977 to obtain additional data on the cost of Navy patient education efforts.

A working task group, consisting of select members of the BUMED Patient Education Group, was designated to review and summarize the survey results. The following narrative summary depicts the status of patient education provided by the Navy Medical Department as obtained from the survey in 1977.

a. All commands reported ongoing efforts with regard to patient information/patient education. Most of them were providing educational services for the most common subject areas identified in the survey. Few had formally structured programs with identifiable coordination from a central location. Most reporting commands identified the primary recipients of their efforts as the active duty dependent category. This category was closely followed by active duty members, dependents of retirees, and retirees themselves.

b. The most frequently reported mode of delivering health education was through the distribution of printed material (leaflets and/or brochures). Other reported methods were training courses, base personnel orientation programs, hospital newsletter, and post newspapers.

c. All commands were requested to provide numerical data on funds and personnel committed to their program, as well as the equipment utilized. The task group then applied standard pay scales to derive an estimated aggregate cost. Approximately 92 percent of the personnel participated in the survey and reported annual expenditures of $981,000. Extended to include the total Navy Medical Department, an estimate of reported cost could easily exceed $1.5 million. This calculated cost is considered to be grossly understated, primarily because only those personnel clearly identified as being engaged in a quasi-formal program of patient education were reported. Obviously, many people are engaged in patient education as part of their normal duties. Also, only fixed inpatient treatment facilities were surveyed and no attempt was made to include the numerous Navy-sponsored clinics and small medical treatment facilities. Their inclusion would significantly increase the estimated cost. It is thus almost impossible to determine, with any accuracy, a true cost of providing patient education. The survey addendum requested the reporting of additional resource requirements for both personnel and equipment, and the respondents identified an additional requirement of $1.5 million.

Administrative support for health education.

Based on the results of the survey, the Patient Education Steering Group recommended that the scope of health education be expanded to reflect the consensus that "the educational process involves staff, patients, potential patients, and family members." Another recommendation was the adoption of the following definition of health education:

> Health education is a process that informs, motivates, and helps people to adopt and maintain healthy practices and life-styles, advocates the environmental changes needed to facilitate this goal, and conducts professional training and research to the same end, by:

- Informing people about health, illness, disability, and ways in which they can improve and protect their own health, including more efficient use of the delivery system;

- Motivating people to want to change to more healthful practices;

- Helping them to learn the necessary skills to adopt and maintain healthful practices and life-styles;

- Fostering teaching and communication skills in all those engaged in educating consumers about health;

- Advocating changes in the environment that will facilitate healthful conditions and healthful behavior; and

- Adding to knowledge through research and evaluaton concerning the most effective ways of achieving these objectives."

Additional recommendations led to organizational changes and the commitment of resources to support health education. On May 31, 1978, a Health Education Division (HED) was formally established at the Naval Health Sciences Education and Training Command (HSETC). The director and deputy director reported aboard in September 1978.

Health Education Coordinators (HECs) were appointed at each NRMC/NH. They were to be medical department officers "selected on the basis of knowledge, interest, and enthusiasm rather than by corps." HEC workshops were held at Portsmouth and San Diego to define goals and objectives, assess capabilities and future needs, evaluate commercial programs, and discuss local program implementation.

From input collected at the HEC workshops, workshops from the previous Surgeon General's conference, the Patient Education Group report, and the Education Officer Committee, the HED issued instructions to establish an Education Department at each BUMED-managed Command and to implement an education program at each Navy medical treatment facility.

Health education activities at the national level.

The following activities are carried out by the Health Education Division (HED) within HSETC at Bethesda, MD:

- List of films and programs from various library sources are collected for evaluation, and recommendations are offered as to their usefulness to the Navy Health Education Program.

- An activity file has been established to catalog the health education efforts at each NRMC/NH by subject classification as well as hospital location.

- Patient education programs are constantly updated and evaluated in terms of relevancy and the overall quality of the product, format, and mode of presentation.

- Subscriptions are carried for journals and professional periodicals so that new trends, applicable ideas, and research articles can be utilized in development of the Health Education Program.

- A monthly newsletter is written and distributed to each hospital command and health education coordinator to keep them abreast of what HED is doing, and to apprise them of the new trends, pertinent articles, and publications available to them.

- A Health Education Exhibit has been constructed depicting the direction of the program and what is in store for the future regarding health education. It was displayed at the annual meetings of the American Hospital Association, the American Medical Association, and the Association of Military Surgeons of the United States.

- HED continues to research the availability of health education materials, including producers, printed media, audiovisual programs, and hardware. A program series called Physician's Educational Resource Library (PERL) was purchased for Navy-wide distribution and implementation and covered six general areas: OB-GYN, cardiovascular, diabetes, child care, family planning, and general health.

In the future, HED is expected to convert the PERL system to videocassette format; implementing various curriculums within Navy programs; make recommendations for education and training for occupational health and safety; and continue to act as liaison between local command HECs, HSETC, and commercial product sources.

Under the order that established the Health Education Division, the following responsibilities were defined:

a. Plan, coordinate, and make recommendations for the development of health education programs in the medical department

b. Investigate and evaluate health education techniques for applicability to medical department health education programs

c. Evaluate health education methods used in the medical department for efficiency and efficacy and suggest appropriate changes

d. Manage and administer the health education program films and scripts

e. Act as coordinator for distribution and purchasing of equipment, films, videotape, slides, audiotapes, etc., for the medical department health education program

f. In cooperation with other divisions, provide for the integration of media support material in the health education training program

g. Develop catalog files of all available health education materials from commercial and government sources and review this material for use in Navy Medical Department Health Education Programs

h. Maintain liaison with all government and civilian health agencies to keep abreast of developments in health education

Additional priority projects that have been placed under HED include: the Navy alcohol safety action program (NASAP), contact point management, the Navy "clearing the air" program (NACAP), and occupational health and safety education training.

Education activities at the unit level.

At each BUMED-managed Command, an Education Department (ED) has been established to implement an Education Program (EP) at all Navy health care facilities. The EP is intended to enhance the quantity and quality of information provided to the health care consumer/provider. Reponsibilities of the Education Department include: professional education for all medical department personnel, safety education, career counseling, patient education, and occupational health education.

An Education Officer (EO), under general direction of the commanding officer, plans, organizes, and directs a coordinated EP at a specific base. The EO may administer programs, but primarily assists staff in administering education using all available resources. According to the EO job description, this person is to:

a. Participate in staff meetings

b. Orient new health service personnel regarding EP

c. Identify ongoing education efforts in the medical facility

d. Identify education needs through liaison with medical facility staff, base personnel, and community

e. Establish close working relationships with all departments in the medical facility

f. Establish contacts and collaborate with base organizations

g. Establish liaison and collaborate with community organizations

h. Visit patient units and clinics to assist in selecting and evaluating patients who would benefit from EPs

i. Implement planned EPs

(1) Establish a procedure for scheduling appointments

(2) Schedule a resource person for administering the program

(3) Establish a procedure for interviewing patients, pretesting, post-testing, documentation, evaluation, and follow-up

j. Supervise all volunteers assisting the education office

k. Maintain records

l. Maintain a library of programs

m. Obtain and establish new programs

n. Procure office and media equipment for presenting programs

o. Participate with continuing education coordinators in stimulating and organizing in-service education. Coordinate and integrate education techniques and projects with those of other programs

p. Expand clinical knowledge in the education field through formal education, workshops, and self study

Within the ED at each command, a Patient Education Program (PEP) has been established "to enhance the quantity and quality of information provided to the health care consumer/provider." The goals of the PEP are

a. To assist individuals to acquire knowledge that will promote their ability to care for themselves more adequately

b. To influence individuals to change attitudes from disease orientation to health orientation

c. To induce behavioral changes to the extent that individuals are willing and able to maintain their health

An Area Health Education Coordinator (AHEC) is designated by BUMED to help plan, organize, and direct a coordinated PEP within the command. The AHEC acts as liaison between unit or field activities and the Health Education Division (HED) under the general direction of HSETC, and is the

first line of communication for the field activities. When problems arise, or when new programs or ideas are used, AHECs will be the primary contact point for the Education Offices and HED. AHECs are chosen on the basis of their experience in and enthusiasm about health education rather than their location or rank. Specific duties for the AHEC include:

- Keeping abreast of PEPs and instructions from Navy, BUMED, and HSETC and passing the infomation to each regional activity
- Contacting HED or the Education Officer for assistance when problems arise that the AHEC cannot answer
- Coordinating with other AHECs to ensure consistency in the administration of the PEP
- Meeting periodically with HED staff to discuss new projects, programs, and common problems in administering PEP
- Traveling throughout the region to assist in developing and implementing the PEP, and to serve as a trouble shooter

Under this scheme of coordination, specific responsibilities for organizing and implementing PEPs are designated at all organizational levels, as follows:

a. The Bureau of Medicine and Surgery:

(1) Provides broad policy guidance on the parameters for PEPs

(2) Provides funding and personnel to support PEP at the headquarters level

b. The Naval Health Sciences Education and Training Command (HSETC):

(1) Coordinates education efforts in the Navy Medical Department.

(2) Maintains a formal liaison with AHECs.

(3) Develops and maintains a patient education resource library.

(4) Evaluates existing PEPs at naval medical facilities and provides recommendations to augment, improve, or change current programs.

(5) Provides educational assistance and multidisciplinary expertise

(6) Evaluates the effectiveness of PEPs through various mechanisms using comments and reaction of health care beneficiaries

(7) Evaluates and procures available educational materials

c. The Naval health Care Facilities:

(1) Establish and budget for patient education consistent with local needs

(2) Continuously assess local patient education needs

(3) Document all formal PEP efforts, including both quantitative and qualitative data

Barriers to health education programs.

The Patient Education Steering Group's survey of 1977 cited several major obstacles to effective health education programing. Most commands listed the lack of adequate resources as the single greatest problem encountered. They reported lack of personnel to perform the educational function, as well as lack of funds to purchase material and equipment. Another frequently reported problem was the lack of clear goals and objectives. These problems have been resolved through the reorganization that has been described. A third significant problem cited in the survey was the apparent lack of consumer interest or demand. The Steering Group recommended a public relations campaign to address this problem. Since then, guidance in this area has been provided by the Bureau of Medicine and Surgery, and local unit development has been encouraged by HSETC to enable each ED to tailor its educational programs to meet individual needs as determined by its beneficiary population.

Involvement of consumers and other health organizations.

The extent to which current consumer interests are represented or actively sought in the planning, organization, and implementation of health education activities at the local level is unknown at this time. Likewise, the involvement of other health care organizations, either public or private, at the unit level has not been estimated. Estimates and insight into consumer participation and inter-organizational cooperation might be made once specific educational plans are made available.

Evaluation of health education programs.

A final question included in the addendum to the 1977 survey addressed the issue of evaluation. The survey pointed out that due to the lack of structure of the then current efforts in patient education, none of the commands had quantifiable data by which the results of their efforts could be measured. Baseline data had never been developed against which current results could be measured. Under the renewed interest in health education, however, the Bureau is expected to provide definitive guidance to the local activities. The primary responsibility for evaluation now

rests with HSETC, which is to evaluate existing PEFs at naval medical facilities and to provide recommendations to "augment, improve, or change current programs." To date, the results of such evaluation efforts have not been compiled.

U.S. Navy
Health Education Case Studies

The following case studies show health education services at four Naval Regional Medical Centers. The National Office provides audiovisuals and the sharing of information about programs and health education materials. Centers must use their own resources to implement programs to meet the needs of their clients. Unlike the VA and USPHS, the Navy facilities primarily serve individuals between the ages of 18-25.

Navel Regional Medical Center

Long Beach, California

The NRMC at Long Beach serves Department of Defense (DoD) employees and other beneficiaries, including active duty and retired personnel, and their dependents from all branches of the Armed Services. The population, estimated to be about 236,000 is scattered throughout a large geographical area, including Los Angeles and Orange Counties. Although there is a high percentage of retired personnel served by the facility, many of them are in a second career. The income level for active duty personnel ranges from very low to upper middle income, and many of them live in poverty-level housing and have inadequate levels of nutrition. The patient population is primarily urban, multi-ethnic, and ranges in age from newborn to elderly. The Center reports about 25,000 visits a month.

Special needs of these patients stem from the frequent relocation of personnel in the U.S. and overseas, creating family separation when the husband is at sea, and a lack of continuity in the delivery of services. According to the respondent, the number of visits to the clinic increases when the number of separated personnel increases; complaints of boredom, loneliness and anxiety are frequently voiced. Many of the personnel have mixed marriages, with an associated uprooting of at least one of the marriage partners. The language barrier often creates a need for interpretors when providing health care services.

The Medical Center

The Naval Regional Medical Center is a multi-service acute care facility that incorporates four branch clinics and employs 1100 personnel. Periodically, affiliations are established for specific services with the University of California at Irvine. The Center includes a 129-bed short

READEX FICHE

term acute care community hospital and has multi-institutional arrangements with all DoD institutions.

The range of services available to both inpatients and outpatients include:

Acute Care Screening
Dental Occupational Health
Dermatology OB/GYN
Dietiary Orthopedics
ENT (Opthalmology & Optometry)
Family Practice
Internal Medicine
Laboratory Physical Therapy
Nuclear Medicine
Surgery
Neuro-Psychiatric
Patient Education
Pediatrics
Pediatrics
Pharmacy
Radiology

The Center has an exlusive full-time medical staff, and all physicians with admitting privileges hold clinics within the facility.

Responsibility for health education

The person who oversees coordination of health education activities also is the Continuing Medical Education (CME) Officer. She reports to the Chief Executive (Commanding) Officer. A Continuing Medical Education Committee, composed of a physician, nurse, Patient Education Specialist, public affairs officer and several civilians, meets quarterly to offer advice on professional education as well as patient and/or community health education. Eighty percent of the patient eduction workload is focused on the outpatient population. Eighty percent of all patient education (inpatient and outpatient) is physician-directed. Geographically, the Patient Education Center is located in the Outpatient Pavillion.

The ultimate responsibility for planning health education programs lies with the Continuing Medical Education (CME) Officer, based upon recommendations of the Patient Education Specialist, physicians and nursing staff. The Patient Education Specialist is in charge of implementing the programs. Preliminary evaluation also is done by the Patient Education Specialist, but comprehensive program evaluation is done by the CME Officer.

Recommendations for new or modified programs are based on the frequency and type of physician-referred consultations, patient requests, and the overall status of the patient population.

Health education activities

The health education programs at the Long Beach NRMC have written goals and objectives aimed at specified target populations. They range from an individualized teaching protocol used by a clinical specialist in a diabetes clinic to a multifaceted life-style change program. The following programs currently are offered:

Program	Target Population
Hypertension	Patients identified by screening to have high blood pressure
Diabetes	Primarily newly diagnosed diabetics (Refresher courses given as necessary)
Contraception	Males & females of childbearing age
Prepared childbirth	Women who are about 7 months pregnant, with their husbands or significant others
Weight Control	Patients with compulsive eating problems
Alcoholism	Patients identified as having an alcohol problem

In addition, monthly health information sessions are conducted in the main outpatient waiting area; each month a new topic is presented (i.e., smoking, blood pressure screening, alcoholism, etc.). This approach has proven to be successful and utilizes waiting time in a constructive manner, according to the respondent.

In the process of being implemented is a stop-smoking program, a pediatric pre-surgical party program, and a more comprehensive post myocardial infarction care program.

Coordination of activities

Patient Education activities for the facility are coordinated out of the CME department. Much of the planning, implementing, teaching, etc., is done in the Patient Education Center. The department also contains a Patient Education Audiovisual Resource Center; a selection of approximately 80 films, 500 pamphlets and other patient-oriented resource material is available. Patients are seen by physician referral via a consult form, or they may refer themselves for information. This procedure saves a tremendous amount of staff time, as the patients are referred for teaching, then return to the health care practitioner for follow-up; it also reduces patient frustration, since an opportunity is provided for questions to be answered in detail. According to the

respondent, the existence of a Patient Education Resource Center broadens the scope of Patient Education by not limiting the department to just a few classes on selected topics. Instead, information is provided on a wide variety of pertinent topics, and available to the patient when the need arises.

Coordination and cooperation with consumer interests is facilitated through a Health Care Consumers Council, which meets quarterly. Members range from the Commanding Officer and selected staff to representatives from retired, dependent and active duty segments of the population.

Cooperation with outside organizations and agencies also is pursued. The Center sponsors stop smoking information sessions and cancer information sessions utilizing American Cancer Society workers and materials. Currently, the Center is working closely with the ACS in developing a comprehensive stop-smoking program with the intent of training the stop-smoking instructors to hold sessions in the Center's branch clinics. Patient education literature and/or films are obtained from various organizations; these materials are used for monthly information sessions or for the resource center. The organizations that have been utilized as resources include:

Long Beach Heart Association (active in CPR programs)
Long Beach Lung Association
High Blood Pressure Council of Los Angeles
Los Angeles Poison Control Center
American Lupus Society
March of Dimes
Multiple Sclerosis Society
Overeaters Anonymous
American Red Cross
Consumer Products Safety Commission
Major drug corporations

The Center also has sought support from the Bureau of Medicine and the Naval Health Science Education and Training Command, which serve as focal points for directives in the form of information, education and resources relating to in- and outpatient populations. This ongoing communication process has been most helpful in fostering growth in the patient education area.

Evaluation of activities

The respondent reports that evaluation of health education efforts is best accomplished at the patient care level when simple questions are asked at the end of an appointment. Assessment sheets provide an opportunity for patients to express their concerns and dissatisfaction, if any, with the health education program. Aside from the patient feedback, staff contributes to the evaluation process by offering suggestions for

improvements and new programs. On a broader scale, the Health Care Consumer's Council makes suggestions for changes and acts as a bellweather regarding health education needs.

Major barriers

Problems encountered in planning and developing health education programs include limited personnel, inadequate time allotment, lack of adequate evaluation methods, diverse patient population, language barriers, geographical limitations and rapid military personnel turnover. To overcome these problems, the Center is developing group programs when practical, and prioritizing projects. The Center has initiated staff orientation for every new doctor, physician assistant and nurse reporting aboard. Attention to the health education program is increasing through greater in-house publicity and by community outreach programs, when feasible. Also, interpreters are used when necessary. Funding does not seem to be a problem. (Patient Education Center funding comes from the CME budget, which is allocated by the Bureau of Medicine and Surgery.) The respondent reports that the Patient Education Program has experienced considerable growth due to the support of the Commanding Officer, the Continuing Medical Education Officer and staff members of the hospital. The need for education is evident and awareness of this need is permeating the professional and patient population daily.

Naval Regional Medical Center

Jacksonville, Florida

The Naval Regional Medical Center at Jacksonville, Florida serves all beneficiaries of the naval health care system, including active duty personnel and their families, and retired personnel and their dependents, who are mostly urban residents. Young adults constitute the largest patient population segment, although the Center does serve patients of all ages. About 5,500 visits are made to the Outpatient Department during an average week.

The Medical Center

The Center's staff consists of approximately 600 active duty military personnel and 300 civilians. A full range of clinical services are offered, except neurosurgery and endocrinology; patients in need of these services are sent to clinics in either Atlanta or Athens, GA. In addition, there are three local branch clinics that may refer patients to the Center at Jacksonville. The Outpatient Department, which employs more than 150 personnel, consists of a Primary Care (walk-in) Clinic, an Emergency Room, 18 specialty clinics, and a Family Practice Clinic. A three-year family practice residency training program also has been established at the Center.

Responsibility for health education

Primary responsibility for coordinating health education activities at the Jacksonville Naval Regional Medical Center is held by the Chief of the Education Service, who currently is an RN. She reports to the Director of Clinical Services and has a staff consisting of one other RN, three hospital corpsmen and one clerk typist. The Chief of the Education Service spends most of her time on staff education, as opposed to patient education. The Education Service Department furnishes audio- visual support to staff personnel who conduct patient education activities, serves as a reference center for patient education resources, and coordinates the scheduling of personnel and space for educational activities.

Decisions regarding the planning, implementation and evaluation of health education activities are made by individual chiefs of clinical services with the asistance of the Chief of Education Services, and the advice of the Health Education Committee. This multidisciplinary committee, which consists of three physicians and five nurses, meets once a month to help coordinate acitivities and to serve as a resource for educational programs. The Commanding Officer of the Naval Air Station gives final approval to programs before they are implemented.

Health education activities

The following programs (and their target populations) are offered at the Jacksonville Navel Regional Medical Center:

- Prenatal and LaMaz classes for pregnant woman
- C-section instruction for repeat C-section candidates
- Pregnancy counselling for pregnant teenagers
- Parenting classes for all expectant parents
- Myocardial infarction classes for post-surgical MI patients
- Weight reduction classes for obese patients
- Hypertension classes for hypertensive patients
- Diabetes control classes for diabetics

In addition, the Navy has mandated a "Clearing the Air" Program for smokers, but difficulties in recruiting a sufficient number of volunteer trainees to conduct the two-hour sessions, three nights a week, has hampered the development of this program.

The respondent views the positive relationship with the civilian community as a particularly creative aspect of the Center's overall health education thrust. The diabetes program, for example, evolved as an out-growth of a community-based diabetic parents organization. Likewise, the hypertension classes became an extension of a hypertension screening project at the Navy Exchange, in which the military dependents played an important supportive role. In the development stage is a child/infant automobile safety restraint project that was suggested by the Health Education Committee in cooperation with the base safety officer; materials being developed on base will be used by the community and promoted through the media. Staff education will be an important component of this program.

Coordination of activities

The respondent reports that attempts are made to coordinate inpatient and outpatient education through common classes for both whenever possible. In addition, some activities, such as CPR training are conducted simultaneously for Center staff as well as for other Navy Commands. To encourage consumer involvement in health education activities, a Consumer Council has been formed, consisting largely of 15 to 20 spouses of active duty personnel who represent the various components (commands, squadrons, hospital, air-network) of the Naval Station. This Council acts as an

ombudsman, presenting the concerns and complaints of the patient population. Although the Council is not involved in the planning of health education activities, it has actively supported several individual projects, such as hypertension screening.

A number of health education activities involve organizations outside the base. For example, a pediatric nurse practitioner and an assistant professor at the University of Florida have provided guest speakers for the Diabetes Program as part of an overall diabetes research project sponsored by the university. A nurse, and spouse of one of the base physicians, who is on faculty at Florida Junior College, conducts the LaMaz classes. Also, the American Heart Association has provided pamphlets and other materials to support the hypertension and myocardial infarction classes. The central office of the Navy provides general health education information and audiovisual support for some of the base programs. At other times, however, materials are disseminated by the central office without warning or planning and are often shelved, since they are not always applicable to current programs.

Evaluation of activities

Evaluation of health education activities, for the most part, is limited to informal patient questionnaires filled out at the end of classes, essentially to determine their value. Patient satisfaction questionnaires also have been administered in both inpatient and outpatient areas, but the information obtained has not been sufficiently consistent to be of value to staff in planning or modifying education programs. The Brady series of health education materials and accompanying evaluation forms have not been employed on this base because of their expense. Only one program, the hypertension class, uses a pre- and post-test, which was developed locally by a charge nurse, primarily to determine needs for continuing care rather than to evaluate the program, per se.

Major barriers

The respondent reports that one of the main problems faced in planning and developing health education programs is the competition for time between direct patient care and the educational activities. This problem is further complicated by a high level of rotation of personnel who are reassigned to other areas and duties. Also, competition exists for limited funds to carry out educational programs. The respondent refers to a "haphazard" shifting of budget line items and a "rob Peter to pay Paul" approach in deciding where funding for equipment and materials will be derived. She also points to the reimbursement system that favors inpatient care over outpatient services, the end result being that more money is diverted to "bleeding bodies" than to health education that might "prevent bodies from bleeding."

To resolve these problems, increasing emphasis has been placed on developing staff skills in applying education principles on a one-to-one basis with patients. The respondent sees her role as that of a facilitator of the education process, finding out what staff members are doing, what they need, and how she can help. Staff volunteer time is encouraged and emphasis is placed on acquiring materials and supplies through each clinical department's individual budget, rather than relying on the education budget or operating funds.

Naval Aerospace Regional Medical Center

Pensacola, Florida

This regional medical center provides health services to active duty and retired personnel and their dependents in all branches of the armed forces. The largest groups of patients are active duty personnel (30 percent) and the dependents of active and retired personnel (55 percent). Patients range in age from 1 to 85 years, and they present a wide range of cultural backgrounds and varieties of illnesses.

The Medical Center

In addition to an officer support staff, the Center employes 520 enlisted personnel, 80 medical officers and 77 nurses. They staff a 115-bed general acute care hospital and 14 walk-in clinics within the outpatient department. About 20,000 outpatient visits are handled yearly by clinics for obstetrics and gynecology, pediatrics, cardiology, neurology, dermatology, internal medicine, surgery, adult primary care, urology, orthopedics, nuclear medicine, eye, ENT, and family practice. The Center has no medical school arrangements, but it does have an active family practice training program. Anywhere from 50 to 150 emergencies may be seen in one day, whereas the outpatient clinics average about 120 visits each day, many of them pediatric.

Responsibility for health education

A Nursing Service Patient Education Committee oversees the planning, implementing and evaluating of health education activities. This committee meets once a month and currently consists of 14 nurse representatives from all department within the Command. The committee reports to the Director of Nursing Services, who along with the Health Education Coordinator and the Director of Clinical Services, reviews and approves all health education activities.

Health education activities

Health education classes and seminars on hypertension, diabetes and infant stimulation are offered to patients and their families by members of the Patient Education Committee. Expectant mothers and their husbands may participate in prenatal care classes, in which the subjects of breast feeding, LaMaze procedures and c-section are covered. Children scheduled for surgery are given a pre-operative orientation and tour to help allay any anxiety they may have; the tour incorporates "Granny's" advice and lasts from 40 to 90 minutes, depending on how many questions are asked. Parents may attend with their child. Closed circuit TV programs on a variety of health care topics are presented continuously from 8:00 a.m.

to 4:00 p.m., Monday through Friday, at both inpatient and outpaint waiting areas. The Patient Education Committee have undertaken many projects to improve and facilitate health education. For example, it has assembled a patient teaching manual and distributed 50 copies to departments and clinics throughout NARMC. It planned and sponsored a Health Fair in May, 1981 at the naval exchange mall. Plans have been made to make this an annual event.

Coordination of Eduction Activities

Health education activities are coordinated through the NARMC Health Education Committee. The Committe approves leaflets and other publicity material, including local media spot announcements, that publicize the availability of health education programs. Also, the Nursing Education Coordinator meets monthly with representatives of Pensacola area hospitals and health departments to share ideas and programs on health education for staff and patients. Cooperation is also received from outside organizations, such as the Arthritis Foundation, American Cancer Society, March of Dimes, West Florida Lung Association, Diabetes Association of North Florida (DANF) and the local chapter of the American Heart Association. A Navy nurse now serves on the DANF Board of Directors. Consumer involvement in health education activities is supported through the Health Services Consumer Council.

Evaluation of Education Activities

Ten suggestion boxes, along with a supply of pre-addressed envelopes, are located centrally around hospital and clinic areas. The envelopes facilitate patient response because the comments or suggestions can be written in the privacy of the patient's home. The respondent reports that between five and twenty patients complete and return patient satisfaction survey forms.

Major Barriers

The respondent reports that without a full-time coordinator and supervisor, the health education programs are minimal at best. There is no budget for the educational activities, so funds are drawn from decentralized sources, i.e., each department purchases its own patient education materials and equipment. The respondent also identifies another problem as the lack of standards or guidelines (from either the JCAH or the U.S. Navy) for patient educational programs. In lieu of such guidelines, staff maintains contact with other area hospitals and shares program ideas and information with them.

Naval Regional Medical Center

Memphis, Tennessee

The NRMC at Memphis serves a culturally and ethnically diverse mix of active duty and retired military personnel, plus their dependents, who reside within a 50 mile radius of the Center. A large segment of the patient population consists of young enlisted men and women and their dependents. The outpatient department averages 10,000 patient visits per month.

The Medical Center

Located about 15 miles from Memphis, the Center employs about 600 personnel. The inpatient facility has a 60-bed capacity. There is no linkage with neighboring medical schools, nor are there any resident or intern programs that rotate through the Center. As a military hospital, it is linked to the Medevac System. Outpatient clinics at the Center include: family practice, adult primary care, ophthalmology, optometry, ENT, urology, general surgery, OB/GYN, pediatrics, dermatology, internal medicine, and nutrition.

Responsibility for health education

Responsibility for coordinating health education programs rests with one of the 60 nurses on staff at the Center. She reports to the Director of Nursing Service, and chairs the Patient Education Committee, which is composed of nine nurses. This committee meets once a month to develop teaching guides for nurses on the most frequently diagnosed diseases and conditions admitted to NRMC Memphis. The respondent reports that the planning, implementation and evaluation of health education activities is varied and fragmented; each clinic area provides its own programs as needed. Most of the programs evolve through agreements between physician and nurse on the needs of individual patients. Patient surveys are carried out periodically by the outpatient administrative office to determine patient needs.

Health education activities

Currently the following health education activities are offered:

- first trimester obstetrics classes for pregnant patients.
- prepared childbirth classes for third trimester patients and their coaches
- a workshop for diabetics and their families

- sound/slide presentations on 28 medical topics available for individual patients or groups of patients

- community outreach lectures presented by the outpatient department administrator to new personnel

- a newsletter on outpatient clinic activities distributed throughout the base

- the Health Care Information Line--a telephone service in which a nurse takes incoming calls from anywhere on base or the local community and either makes appropriate referrals or gives specific advice in the case of emergency

Nutrition-Weight Control sessions are held weekly by a dietitian. Two aspects of the health education activities at the Memphis NRMC appear to be particularly creative. One is the adaptation of audiovisual materials provided through the Physician Education Resource Library (PERL) System. Slides and script narrations available through this system are modified to suit specific needs or circumstances of the patient population. The other unusual aspect is the development and use of flow sheets to facilitate documentation of patient education on the wards.

Coordination of activities

Aside from the Health Care Information Line, described earlier, there is little done in the way of coordinating inpatient, outpatient and home care education activities. A registered nurse from the local chapter of the American Diabetes Association used to participate in the diabetes workshop, but funding for this activity has been discontinued.

Evaluation of activities

Course evaluations constitute the primary means for evaluating the health education activities, although patient surveys also have been used to determine whether specific educational needs are being met. The respondent states that at present staffing levels, there is no one who has time to develop and administer a systematic evaluation system. However, a patient education coordinator is now being trained, and evaluation will be one of the responsibilities of this individual.

Major barriers

The major problems faced in planning and developing health education programs at the Memphis NRMC are the lack of a central outpatient education coordinator and working space, the extremely transient population, a poor public transportation system serving the base area, and the lack of

any budget earmarked for health education programs. Although solutions to these problems do not seem forthcoming, approval has been granted for an individual to receive on-the-job training in the area of health education. With time to devote to education programs, it is thought, this person may be able to make a dent in some of the problems listed.

OVERVIEW
U.S. Air Force
Health Education Programs

Medical care is provided by the U. S. Air Force through the operation of 7 area medical centers, 9 regional hospitals, 49 base hospitals, and 18 clinics within the United States. Specialty services are provided in eight of the base hospitals, and in all of the area and regional hospitals, as well as in the School of Aerospace Medicine. The 65 hospitals have a total of 4,830 beds. Outside of the United States, there are 16 hospitals with 795 beds and 20 clinics. In 1979, more than three million persons were eligible for treatment in Air Force hospitals. During that year, there were 261,968 hospital admissions and 14,771,743 outpatient visits at Air Force medical facilities.

A current profile of the patient population is not available. On the assumption that the patient population reflects a cross section of active duty Air Force personnel, patients can be characterized, primarily, as between the ages of 19 and 40, with the following ethnic distribution: 82.3 percent Caucasian; 13.9 percent Black; 3.3 percent Hispanic; and 1.5 percent Asian American. Of the enlisted personnel, 76.5 percent are high school graduates; 18.6 percent attended some college but received no degree; and 2.4 percent have attained a Baccalaureate or higher degree. Of the officers, all have earned a Baccalaureate degree or higher, with the exception of a small percentage of nurses who have a diploma or an associate degree.

Organizational overview, purpose and mission

The Medical Service of the U. S. Air Force has several mandated functions that involve health education activities. Within the aerospace medicine program, the Medical Service is charged with: "developing, implementing and supervising military public health programs to maintain and improve the well-being and productivity of individuals and communities; preventing the occurrence and progression of disease and injury through application of the many principles of health promotion, specific protection, early diagnosis and prompt treatment, disability limitation and rehabilitation; and providing necessary research support." Medical Service also is charged with providing medical care through the operation of area medical centers, regional hospitals, base hospitals and clinics, and with providing complete dental care for eligible personnel, a preventive dentistry program for dependent children, and an area dental laboratory program for dental health care professionals.

Administrative support for health education

Effective July 1, 1977, the Air Force Surgeon General established the USAF Health Education Program (HEP). It is now thought to be the largest coordinated health education program in the United States. The overall goal of the program is to help Air Force personnel, dependents, and retirees become more aware, more knowledgeable, and more active in the management of their own health care. A HEP Central Office, originally established at the School of Health Care Sciences, Sheppard Air Force Base, TX., is now a Division of the Air Force Medical Service Center, Brooks AFB, TX. The six member staff of this office is multidisciplinary, and may include any health professional. The present staff includes two nurses, one health services administrator, one medical technician, an administrative technician and a secretary.

Responsibilities of the HEP Central Office staff include the provision of information and information sources to health professionals at Air Force locations worldwide. At each medical facility, a person is appointed to serve as a Health Education Coordinator (HEC). Any health professional is eligible for this position, but an officer usually is assigned.

Activities of the HEP Central Office

The Central Office serves as a clearinghouse for health education program materials and supplies copies of these materials at the request of the HECs. Each medical facility was provided with a series of health education audiovisual programs originally produced by Core Communications, Inc., which are now sold by the Robert J. Brady Company, Bowie, MD. Each facility was allowed to exchange up to five programs in the series for other programs available from the Brady Company.

The Central Office staff continues to collect health education program examples from Air Force facilities and from facilities outside of the Air Force. It also has compiled a list of patient education audiovisuals, recommended programs from the U. S. Army and U. S. Navy, and selected commercial programs. A list of some of these program materials is provided in the Appendix. In addition, The Central Office has developed audiovisual orientation programs that can be used (1) by HECs to explain the overall HEP to staff, or (2) by facility staff to orient new HECs during their transition period.

Consumer programs also have been developed by the Central Office according to priorities determined in the field. Local programs developed at Air Force facilities may be modified for general use throughout the Air Force. The Central Office, upon request, occasionally offers consultation via telephone or correspondence. Typical requests include: suggestions of ideas for health fairs, or for Womens' Health Day; methods for documenting specific programs; suggestions for preparing the budget; and advice on the use of audiovisual equipment.

The Central Office sponsors training workshops each year, strategically located in three locations in the United States and one in Europe. A HEC or representative from each medical facility attends. The initial workshop focuses on quidelines for developing a HEP. The second workshop, conducted after medical facilities have received the Brady audiovisual materials, is directed toward enhancing the use of these materials in existing programs at the local level. Faculty for the workshops consists of central office staff, civilian consultants and selected HECs. A HEP Newsletter is published quarterly (approximately February, May, August, and November) and sent to HECs at each USAF medical facility. The newsletter is used to update coordinators on national health education issues and Central Office activities, and to share local medical facility health education activities.

The Central Office does not implement other education programs. Coordinators are encouraged to expand their education training by self study. Some facilities offer inservice training for their staff. Central Office staff believe the management structure of their program gives the necessary coordination, and support to Air Force facilities staff to stimulate the development and implementation of programs that effectively use already developed materials, yet allows each facility to adapt programs and materials to fit its local needs.

Health education activities at the unit level

Through the HECs, programs have been developed for inpatients, outpatients, and "well persons" in the military and dependent community. Activities reported include one-on-one counseling, articles in newspapers, tel-med systems, bedside audiovisual guidance, commander's call presentations, posters, puppet shows, and health fairs, and a project whereby Boy Scout troops collect outdated medicines in public housing areas.

The Brady materials are used for one-to-one counseling. Patients are usually referred to educational programs through consultation with a health care provider; however, self-referral is permitted. The Brady materials also are used for group classes and are incorporated into existing programs. For instance, some prenatal series have incorporated "Building a Healthy Baby," "Relaxation Skills," and "Understanding Back Pain." Weight reduction classes may also use "Relaxation Skills."

Specific details on unit projects are not available, but the following examples were briefly summarized in the July 1979 HEP Newsletter:

> A pediatric nurse practitioner at USAF Clinic Bentwaters (England) enlisted the assistance of the Officers Wives Club to raise funds for junior grade enlisted personnel to obtain car seats for their children.

- Staff at Travis AFB (California) is developing a program to orient patients to the Family Practice Clinic. This program will be made into filmstrips to be shared throughout the AF medical services facilities.

- Child care classes are being developed at Moody AFB (Georgia).

- Blood pressure checks have been conducted at various bases, as well as "drug busts" (old drug pick-ups) during Poison Prevention Week.

Health education coordinator role

A review of administrative assignments, as of February, 1980, shows that 93 (77.5 percent) of the HECs were nurses, 9 (7.5 percent) were medical service administrators, 12 (10 percent) were members of the Biomedical Science Corps including four physician assistants, three physical therapists, two optometrists, one pharmacists, one dentist, and one clinical social worker. Two physicians, one dentist, and three medical service technicians (enlisted within departments of nursing) complete the HEC assignment listing.

HECs are repsonsible for inpatient, outpatient, and community health education. Some HECs, however, have enlisted the assistance of other professionals and may have assigned a coordinator for each of the three areas. The majority of HECs do teach and conduct programs. In adddition, other professionals assist with designated programs. For instance, one professional may teach hypertension classes, another diabetic classes, another prenatal, another smoking cessation and so on. The HEC role is an additonal duty for all HECs, except three. Full time positions have not been authorized because of personnel constraints. The time devoted to health education is variable. Each medical facility's health education program is an entity and the HECs customize their programs to meet the needs of the people in their local situations. In addition to serving the people's needs, HECs establish their programs based on time constraints, space designations, budget allocations, and the assistance offered from the professional staff.

Involvement of consumers and other health organizations

A number of units have developed health education programs in cooperation with other agencies in their communities. An example is Malmstrom AFB (Montana) where, in coordination with the local American Heart Association affiliate, blood pressure screening clinics were conducted and audiovisual programs were shown periodically at various locations on the base and in the community.

Evaluation of health education activities

Given the exchange of health education materials between air force bases, as facilitated by the Central Office, one could assume that some cost savings are being realized through the sharing of resources, but specific figures are not available. Information that may be collected in the future to evaluate both the cost and the impact of the health education programs include:

- budgets of the Central Office and various units
- numbers of unit staff directly involved in the planning and implementation of health education activities
- numbers of patients and families who were provided with health education materials
- numbers of health education encounters
- samples of health education plans by various units
- reports of units documenting the results of their health education activities

Barriers to implementing health education activities

The health education program faces some financial and manpower problems. The USAF Medical Service is budgeted and staffed relative to the number of inpatients and outpatients treated. It does not receive credit for the time spent educating Air Force personnel and dependents about health. However, the USAF Surgeon General is aware of the problem and hopes to remedy the situation by obtaining recognition for health education through adjustments to medical manpower standards and budgeting procedures.

Activities being undertaken to enhance implementation of health education in the Air Force include: development of a written policy (now in draft stage) on health education by headquarters, development of a specified system for tabulation of health education encounters, establishment of a full-time HEC Position, and adoption of evaluation procedures.

Appendix

Health Education Program Materials:

1. Basic Cardiac Life Support (BCLS) Programs,
   A guide to developing a pyramidal training plan.

2. A Guide of Smoking Cessation Programs and A Compendium of Health Education Materials to Discourage Smoking.

3. Prenatal Program Information,
   A list of resources for developing prenatal education program.

4. Things You Always Wanted to Know About X-ray But Were Afraid to Ask,
   A patient handout booklet.

5. Audiovisual Resources,
   A list of audiovisual programs available from the Central Office. This is a compilation of programs that have been previewed from commercial sources, as well as programs that have been developed at the Central Office.

6. The Central Office also maintains a library of printed resources available for health education programs. References are maintained on a card file.

U.S. Air Force
Health Education Case Studies

The following case studies show the health education activities at four U.S. Air Force hospitals and clinics. These facilities have access to a six-member central office staff which provides consultation, staff workshops, audiovisuals and a clearinghouse of health education materials and programs. Each medical facility is to appoint a health education coordinator. This person usually carries the health education responsibility along with other duties. The examples show how these facilities have organized scarce internal resources, and community resources to meet health education goals.

USAF Hospital Fairchild

Fairchild, AFB, Washington

The Fairchild AFB Hospital serves about 8,000 persons who are on active duty, dependents or retired military personnel. The population served includes many European and Asian dependents, a large number of whom find it difficult to overcome language barriers, cultural change, and military requirements. As a result, according to the health education coordinator, there is a high incidence of stress on family living for the foreign dependents on base.

The Hospital

Fairchild AFB Hospital has 60 beds, including 10 cribs, and employs about 300 professionals and other staff. Most of the professional staff are in the military. However, some civilian physicians and nurses are civil service employees. All specialty services are offered on base, except for urology and neurology, which are offered through CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) and regional facilities via the Air Force Air Evacuation System.

Each month, the outpatient clinics handle a total of about 1000 visits, 80 of which are scheduled for formal education classes and/or one-to-one education sessions in the office. Educational meetings in the prenatal clinics account for another 25 visits each month.

Responsibility for health education

The health education coordinator is a registered nurse with a masters in Public Health who serves, primarily, as the base's public health and

preventive medicine officer. He spends about one afternoon per week in his role as health education coordinator. He is responsible for all inpatient and outpatient education, as well as the training and education required by the Occupational Safety and Health Administration (OSHA). Assistance for inpatient education is provided through the nursing in-service director. The clinical specialist, who cares for the patient is responsible for deciding the nature of the educational program needed. This information is relayed to the health education coordinator who, in turn, determines what resources are at hand and who is capable of providing the educational component of care.

Decisions on what health education activities or training needs should be pursued are made by a health education committee, which consists of the health education coordinator, a few staff RNs, a physical therapist, and a dentist. This committee keeps track of resources available and makes suggestions on how they might be managed.

Health education activities

Currently, no major health education program is offered. Instead, individual patient needs are assessed by a clinical specialist, the educational plan is tailored by the health education coordinator, and the plan is implemented by a clinical specialist and/or the nursing staff.

A new program on aerobic and physical conditioning has been mandated for the entire Air Force and will soon be implemented. Another new program, the Women, Infant and Children (WIC) Program for Nutritional Training, was in the planning stages before its funding was cut in the current round of budgeting.

Health Education activities at the Fairchild AFB are conducted as "standard operating procedure," according to the health education coordinator. Classes are offered on hypertension, abestos hazards and prenatal care.

Coordination of activities

The health education coordinator is given some direction through a health advisory committee, which meets quarterly to discuss matters related to the delivery of health services. The committee represents both officers and enlisted personnel. There is open attendance at meetings and the agenda is prepared by the health educator. The primary focus has been on patient satisfaction and substantive ideas on educational program planning.

The health education coordinator oversees the coordination of health education activities between base operations and community services. Occasionally, military personnel may be referred to civilian facilities in the area, of which there is a Seventh-Day Adventist and two major community hospitals. Various voluntary health organizations in the community, such as the local chapters of the American Cancer Society and American Heart Association, provide educational materials on request. The health education coordinator also sits on the County Board for the local chapter of the ACS. The base fire department has volunteered to provide CPR training on base.

A Community Health Consortuim, an organization of community health agencies, exists in the Spokane area and has set up a cable television channel that broadcasts health education programming for four hours each night, five times a week. The health education coordinator reports that he does not know to what extent the base population tunes into the programming.

The coordinator reports that he takes advantage of the library and material resources available from the Central Air Force Office at Brooks AFB in San Antonio. He specifically mentioned receiving information, on request, about procedures involving casarian sections, and training for cataract removal.

Evaluation of activities

Evaluation of health education consists of using the pre-and post tests provided in the Brady System of educational films. The health education coordinator reported that a review of the test results pointed out an area of omission in the Brady series for diabetics. As a result of this finding, a sixth education session has been added to the five Brady programs.

Major barriers

The fundamental obstacle to health education is the lack of time for the clincal specialist to teach the desired educational classes. Since funding for the clinic is dependent on the volume of patients seen, the incentive is to run patients through the system. More patients, however, mean that fewer staff hours are available per patient for educational time. Also, since health education is viewed as extra duty, there is little incentive for staff to pursue education activities that eventually conflict with time needed for required clinical duties. The only way to overcome this problem, according to the respondent, is to have a full-time health education coordinator.

Another problem is the scheduling of health education clases during duty time. Over time, class attendance drops off, regardless of whether the classes are scheduled for the day or evening.

USAF Hospital Plattsburgh

Plattsburgh AFB, NY

The USAF Hospital at Plattsburgh serves 4,000 active duty personnel, 10,000 dependents, and 5,000 retirees. Approximately 60 percent of the active duty personnel are in the 20 to 30 year-old-age group. The Plattsburgh base is one of the Strategic Air Command (SAC) centers, and the military population, therefore, is not as transient as at other military installations.

The Hospital

The USAF Hospital at Plattsburgh is a 20-bed facility that employs 185 persons, including 12 physicians, 3 physician assistants, 3 nurse practitioners, 17 registered nurses, and 96 medical technicians. The facility provides specialized services in family practice, internal medicine, pediatrics, surgery, aerospace medicine, and psychiatry. Patients requiring other specialized services not available on base either are referred to medical services in the civilian community, or are air evacuated to other regional military facilities. The hospital averages approximately 6,000 outpatient visits a month. In addition to the specialties named above, the outpatient department offers services in optometry, pharmacy, laboratory, radiology, physical therapy, environmental medicine and bioenvironmental engineering.

Responsibility for health education

Health education activities are coordinated by a primary care nurse practitioner who is assigned to a family practice panel, which also includes one physician and one physician assistant. Worker (occupational) health education is assigned to environmental medicine, primarily because the other specialties do not have either the perspective or the time to undertake education matters. The primary care nurse practitioner spends about five percent of her professional time on coordinating health education activities. This work is considered extra duty.

The planning, implementation and evaluation of health education activities are carried out by the health education coordinator in cooperation with the chief nurse, the dental health officer, the hospital commander, and the patient education advisory committee. This committee is chaired by a family practice physician and is composed of members of various consumer groups throughout the base.

Health education activities

At the Plattsburgh AFB Hospital, health education activities are grouped into four areas:

Application of the Brady Programs, which are standard throughout the USAF. A wide variety of topics, ranging from information on specific diseases to guidelines on more general subjects, such as relaxation skills, are covered in a series of film strips, audiotapes and hand-out materials that can be offered to patients by either practitioner or self-referral.

Occupational health programs, which include hearing conservation, respiratory protection and specific hazard briefings; e.g., solvent use, painting and welding.

Health fairs, which are provided to the base and surrounding community populations, usually in conjunction with other base activities.

Individual sessions (practitioner-patient), usually disease specific; e.g., veneral disease, hypertension, diabetes.

Health exhibits are displayed and information distributed in high traffic areas of the base. Topics usually are selected to coincide with national programs, e.g. dental health in February, poison prevention in March, career awareness in April. Occasionally, subjects are chosen specifically for the base population, such as hearing conservation and prevention of cold injury. The family practice physician and the health education coordinator both contribute health education and information articles to the base newspaper. Additional health education programs are planned for topics on nutrition, physical conditioning, and weight loss. The programs are carried out by three RNs, two LPNs, two physical therapy technicians, and one diet technician, who have an interest in health education. They volunteer five days per week to assist in showing the Brady films or in instructing patients who are scheduled for health education appointments.

Coordination of activities

Coordination of health education activities between inpatient and outpatient settings is achieved through various committee linkages. Consumer representatives rotate through the Patient Education Advisory Committee, which meets once a month. The Aerospace Medicine Council provides a forum for interested agencies to discuss, coordinate and develop policies regarding health education programs. Hospital charge nurses meet once a month to discuss how to instruct patients on their care following discharge and what outside resources are available for continued health education.

Numerous organizations included in the County Council of Community Services, such as the American Cancer Society, the American Heart Association, and the federally-funded breast cancer project, have been involved in cooperative health education with the Plattsburgh AFB Hospital, mostly in health fair activities.

The USAF Health Education Program Central Office provides program guidance, resource listings and visual aids on a permanent or temporary loan basis to the local hospital. Also, upon request, the Central Office will develop selected programs depending on base requirements.

Evaluation of activities

Evaluation of health education programs is carried out at two levels: knowledge and satisfaction. Many of the Brady films have pre- and post-tests to provide a means of measuring changes in knowledge about health topics. To evaluate the overall health education program, the patients are encouraged to fill out patient satisfaction questionnaires while waiting at the clinic or soon after they have returned home. The forms are sent to the Patient Affairs Office and then to the health education coordinator, who evaluates program progress.

Major barriers

The health education coordinator reports that the major obstacle in implementing health education programs is the lack of time and commitment on the part of the consumer to followup. A major shortcoming of the scheduling system is the inability to manage all the patients referred to health education on the day of their appointment with physicians. This necessitates making another appointment on another day. Ideally, the education session should be scheduled immmediately after the patient leaves the physician's office, but with the limited number of educators available, this is impossible. Personnel scheduled for group education classes often do not have or will not take the time to attend. Those who start the sessions seldom complete the entire series, and attendence at these classes often drops after one or two meetings. No remedies for these problems are foreseen in the near future.

Health education activities are financed, in part, through the local hospital budget and allocation process, and in part through the central USAF fund and community resources, so funding of projects is not considered a major problem.

USAF Hospital Pease

Pease AFB, NH

The Pease AFB Hospital serves a diverse socioeconomic, ethnic and cultural mix of approximately 41,600 persons, primarily Air Force and Navy active duty personnel (7600), their dependents (19,100), retired military personnel (5500), and dependents of retired or deceased military personnel and other eligible beneficiaries (9,400). The median age of the outpatient population is 30. Two-thirds of the outpatient workload consists of patients between 18 and 49 years. The 40-to-60 age group accounts for 30 percent of the outpatient workload and about 59 percent of inpatient admissions. Retirees and dependents account for about 40 percent of the inpatient bed load.

The Hospital

The Pease AFB Hospital is currently designated as a 60-bed facility with a planned capacity of 70 beds (56 medical/surgical, 4 intensive care, and 10 obstetrics). A total of 342 personnel are employed (83 officers, 184 enlisted, and 75 civilian employees). Thirteen medical specialty and seven ancillary services are staffed by 19 physicians, 9 dentists, 33 nurses, 5 physician assistants, 4 nurse practitioners, and several other officers. The Hospital Quarterly Report for Oct.-Dec. 1980, registers 278 admissions; 1,365 inpatient days; 25,762 lab procedures; and 10,357 outpatient visits. In an average day about 200 outpatient visits are made. General practice/family medicine accounts for about 28 percent of the outpatient visits. Pediatrics and emergency room visits each total about 11 percent, and physical therapy acounts for 9 percent. The remaining visits are about equally split among 12 other clinics.

Affiliations have been established between the Pease USAF Hospital and the New Hampshire Vocational Technical School for the training of LPNs, and with the University of New Hampshire Nursing School. Pending approval, an affiliation will be established with Boston University School of Medicine to provide multi-specialty services via medical students.

Responsibility for health education

The planning, implementation and evaluation of health education activities and programs is the responsibility of the Health Education Coordinator (HEC), who reports to the Hospital Commander. This role of coordinator is considered an additional duty, the primary duty of the coordinator at this base being that of charge nurse of all the clinics. In the coordinator's job description, the purpose of the position is to "foster and continue the process of patient education through patient care providers. The HEC may administer programs, but primarily will assist the staff in presenting programs and in utilizing all available resources." Under duties and responsibilities, the coordinator:

- Attends and participates in staff meetings
- Identifies ongoing health education programs in medical facility
- Identifies patient health education needs through liaison with medical facility staff, base personnel, and the community
- Establishes close working relationships with all departments within the medical facility
- Establishes contacts and collaborates with base organizations
- Establishes liaison and collaborates with community organizations
- Visits patient units and clinics in order to assist in selecting and evaluating patients who would benefit from health education programs
- Implements planned educational programs
  a. Establishes procedures for appointment scheduling
  b. Schedules resource person for administering program
  c. Establishes procedures for interviewing patients, pre-testing, post-testing, documentation, evaluation and follow-up
- Maintains records of coordinated programs
- Maintains a library of programs
- Obtains and establishes new programs
- Maintains office media equipment for presentation of programs
- Orients new health service personnel regarding the Health Education Program
- Participates with continuing education coordinators in the stimulation and organization of in-service education. Coordinates and integrates health education techniques and projects with those of other programs
- Utilizes other resources to write newspaper articles
- Expands clinical knowledge in health education field through formal education, workshops and self-study

Health education activities

The health education programs at Pease AFB have evolved since July, 1977, under a systematic process that includes an assessment of the health knowledge of the patient, family or community; planning to meet educational health goals

of the patient, family and community; implementation of programs to meet the health goals; and evaluation of the patient and family's beneficial health care changes that continue after the illness ends.

As of December 1980, health education activities have been implemented in the following areas:

Hypertension clinic
Diabetic clinic
Breast Self Examination and PAP program
Arthritis clinic
Hearing conservation
Low back pain clinic
No smoking clinic
Relaxation clinic
Take-Off-Pounds Sensibly Club
Cluster clinic for Pediatrics
Prenatal clinic
Walk for Health Club
Dental health program

Each of the clinic health education classes is conducted according to program protocols that establish (1) appointment schedules, (2) sets of specific objectives, (3) teaching methods (lecture, discussion, demonstration, patient performance, films and slide-show presentations, visual aids, models, and handout materials), and (4) evaluation procedures. All outpatient clinic teaching is done by the health education coordinator.

In her Annual Program Report, the health care coordinator presented a survey of activities currently underway as of October, 1980 and specific mention was made of the following:

- Hypertension screening has been held every six months; of the 214 screened, 16 were referred for follow-up care.

- The Dental Clinic coordinated the following programs: prenatal counseling (weekly); plaque control classes (weekly); children's dental health programs in February; visits to the Exeter Day Care Center to examine four-to-seven year-olds; open house in July with oral cancer screening, games for children, and information on the use of x-rays; and an annual Spring health fair.

- Pediatric Clinic staff visited all the area elementary schools during the Spring, and a Cluster Clinic is held once a week for two-week-olds and parents.

- The Mental Health Clinic has participated in a base-wide "family month," with presentations on such subjects as "families in transition", the "divorce process" and "working women and input on the family."

- The base-wide Great American Smoke-Out program, sponsored in part by the American Cancer Society, played a prominent part in the base health fairs in 1979 and 1980.

- Ten American Red Cross volunteers enrolled and completed the basic blood pressure CPR course provided on base.

Several innovative health education programs have been developed in the areas of family health and stress control at the USAF Hospital Pease. Starting in October, 1977, the base offered Systematic Training for Effective Parenting (STEP). This program is a nine session parent study group program, which encourages the development of parenting skills that foster mutual respect, cooperation, responsibility and self-reliance. By working together in a small group of 6 to 12 members, STEP participants are helped to recognize that their problems are not unique. They share experiences and common concerns, identify both effective and ineffective ways that their children have been responding to each other, and learn alternative approaches that can lead to more satisfying relationships for both children and parents.

In December 1979, the Mental Health Clinic, under the direction of an assigned psychiatric social worker, initiated a six-week Marital Counseling Seminar. The seminar is designed to enhance individual sensitivity to the needs of one's spouse, particularly in the unique circumstances of the military environment. The impact of frequent PCS impact on children, TDY separation, and trauma of being thrust into new social and workday relationships are analyzed with a view toward reducing anxieties as much as possible.

The oldest creative program introduced by the health education coordinator is a series of one-hour relaxation sessions, given six times a week to patients with stress. A set of six commercially produced tapes and slides, showing relaxing scenes and images with a soothing sound track, have been used effectively to lower stress and improve patient disposition.

The health education coordinator has compiled a small but comprehensive set of communications available through library loan to patients. In addition, she has amassed an impressive number of health education handouts. A weekly health education column entitled, "News from your HEC," was initiated in the base newspaper, The Seacoast Flyer, in July 1979. As of October, 1980, a total of 56 articles had been written by Lt. Colonel Ruth a Fender, the base health education coordinator. She also has written a health services resource book entitled, Agencies of Seacoast. The Robert J. Brady materials are used by inpatients and outpatients. In addition, the booklet "All about X-rays" is distributed to patients by the X-ray Department, the booklet, "Why Am I In Isolation" is presented to patients on wards where isolation precautions are observed, and a no-smoking coloring book, "Happy Times Coloring and Game Book" is given to children in the clinics and hospital.

Coordination of activities

To aid in the development and coordination of health education activities, the health education coordinator has established a Patient Education Committee, whose members include: the charge nurse of the medical ward, an OB/GYN nurse practitioner, the hospital educational coordinator, staff nurses from the surgical ward, SCU, and medical ward, one LPN from the OB ward, and two LPNs from the Family Practic Clinic. The Health Education Coordinator is the chairperson of the committee, which meets at least once a month. The objectives of the committee are:

1. To develop patient teaching guides for common health problems based on current therapy and practices seen in this facility

2. To maintain a file of materials for teaching purposes. This material would be available for use by all professional personnel

3. To develop the teaching skills of those interested in patient education in order to assure success of the program

4. To develop a method for documenting the Patient Education process with reference to family participation if applicable. This documentation should be done according to accreditation agencies

5. To evaluate the Patient Education Program on a periodic basis

A review of the actions of this committee, pursuant to these objectives, shows discussions on: new discharge instructions for diabetic patients; approval of a nursing discharge summary form to document discharge instructions; results and response to clinician visits to day-care centers and schools; letters of patients in response to their experience in the clinics or hospital; feasibility of patient medication cards; scheduling problems; plans for the annual health fair; reports of off-base meetings attended by staff; reviews of new films and other educational materials; needs for new topics to cover in the clinics; problems associated with the referral of patients; the Health Education Program newsletter; professional staff cooperation and participation; developments and progress made by the various health clubs on and off-base (e.g. The Arthritic and Ostomy Clubs); cooperative efforts between voluntary health care organizations and the base; suggestions on the use and distribution of various educational and informational publications; evaluation procedures; new routines involving patient care and education; and means for obtaining more funds for educational materials.

Coordination between inpatient health education activities and those in the outpatient clinics and other settings is accomplished through (a) invitational lectures to personnel at various meetings, the Commander's call, and other group services; (b) personal health counseling provided during patient visits to the Health Education Office; (c) health and safety counseling during outpatient and inpatient visits; and (d) home visits to arthritic patients and

others who are recouperating from illness. The Health Education Coordinator also briefs clinic sections on their responsibilities at charge nurse, professional, and Wing Commander staff meetings. Her monthly summary of educational activities also is widely distributed.

Consumer involvement in the planning and direction of the health education programs is fostered through the Consumer Review Committee, which meets quarterly, primarily to discuss problems and make recommendations on procedural matters. The committee is chaired by the Hospital Commander and representatives include the Vice Wing Commander, the Hospital Administrator, (who prepares the agenda), the director of patient affairs, the social actions (equal opportunity and minority affairs) representative, junior officer's counsel, and representatives from the 1st Seargent position, the Communications Squadron, CHAMPUS, the Fleet Reserve Association, the NCO Wives Club and the Officer's Wives Club, as well as the Health Eduction Coordinator.

Since a large number of base children go to the local community schools, the health education coordinator has established communication with the school health nurses. She also attends the monthly Health Systems Agency meetings in Concord, NH. There is ongoing communication and exchange of ideas, materials and personnel between the base and local community agencies when requested. The extent of cooperation between these agencies and the base can be estimated by the number and variety of organizations that exhibited at the 1980 Health Fair on base. Organizational booths included:

The NH Diabetes Association
The NH Society for Autistic Children
The NH Chapter, March of Dimes Birth Defects Foundation
Muscular Dystrophy Association
Hemophiliac Association
NH Association for Mental Health
Arthritis Foundation
Cancer Society
NH Heart Association
Eye Clinic at Pease AFB (for glaucoma tests)
Flight Surgeon's Office (hearing exam in hospital)
EKG's (Flight Surgeon's Office)
Blood Pressure Booth
Dental Clinic
A Table for 4-5-6th Grade student exhibits on
nutrition, coping with acne, arthritis in children,
Huff and Puff, Baby Sitting, for
Children's films; and for dissemination of brochures
Laboratory booth (Blood sugar and urinalysis)
Breast Self Examination

Evaluation of activities

A questionnaire periodically is give to consumers during interviews at various clinics, and at the health fair. Feedback from staff and the Air Force Consumer Health Education Division, general inspections, and visits from accrediting bodies provide ongoing evaluation of the health education activities. In the future, the health education coordinator reports that pre- and post-program testing procedures will be incorporated to better assess patient response.

Major barriers

According to the respondent, the major obstacles to planning and developing health education programs is the low level of funding provided and the lack of time to devote to the programs. All of the health education activities subsist on a budget of $2,000, which is earmarked only for supplies, equipment, books, tapes, and travel to a national meeting. Patience and resourcefulness in obtaining free materials and the ability to "scrounge" around for bargains, donations, and trade-offs are the most effective methods of dealing with those obstacles. An example is the acquiring of a tape deck from an Air Force research project that was phasing out.

USAF Hospital Mather

Mather AFB, California

The Mather AFB Hospital serves the total population living in Sacramento and outlying rural areas who are on active duty, are military dependents, or are retired from military service. The age range for active duty and adult dependents is from 17 to 55 years, the range for retired personnel is from 40 to the 90's. The population served represents a broad mix of cultural and ethnic groups, with a sizeable number of Asian descendants.

The Hospital

Mather AFB Hospital is a 75-bed acute care military facility with 510 employees. Through an affiliation with the University of California at Davis, interns from the David Grant Medical Center, in Davis, are used to staff the outpatient clinics, and medical, surgical, coronary care/intensive care, and obstetrics units.

The outpatient clinics average 20,000 visits per month. The services offered include: ENT, eye, orthopedics, surgery, podiatry, internal medicine, family practice, obstetrics, respiratory care, and flight medicine. The Chief of Professional Services, who reports to the Hospital Commander, oversees the administration of the outpatient clinics. All physicians are accountable to the Chief of Professional Services.

Responsibility for health education

Health eduction is designated as a function of the outpatient clinic, but it does not have departmental status. The base health educator is an adult nurse practitioner, who reports to the Chief of the Nursing Department. This person, who is also designated as the base health education coordinator, has the overall responsibility for planning, implementing and evaluating the health education activities. She is assisted by midwives and OB/GYN nurse practitioners in implementing the prenatal and birth control education programs. The review and approval of health education activities is provided by an executive committee consisting of the health educator, the chief nurse, the base social worker, a dentist, a bioenvironmental specialist, a dietitian, and a midwife.

Discussions regarding the development of health education activities are held between the health educator and the Health Education Advisory Committee, whose members include key representatives from hospital administration, physical training, bioenvironmental (occupational) services, dentistry, nursing, veterinary medicine (responsible for food inspection), pharmacy, dietary, and

physical therapy services. This committee not only decides what programs should be initiated, but also decides who should be given what responsibilities in the programs, suggests ways to involve staff in the programs, and suggests solutions to problems that may exist regarding the implementation of programs.

Health education activities

The health educator reports that the following health education programs are currently active at the hospital:

Baby Care Classes

A discussion of anatomy and physiology, good health practices during pregnancy, and the process of labor and delivery for prospective parents. Complications also are discussed. A tour of the labor and delivery section is conducted and films are shown. Classes are held every week and enrollment is by appointment.

Birth Control Classes

A discussion of the advantages and potential complications of the various methods of birth control. Enrollment is by appointment at the OB Clinic.

Weight Control Classes

A group setting for individuals who desire to reach and maintain normal weight by developing good eating habits. Physician referral is required. A behavior modification process is employed. The Dietary and Health Education Departments offer classes on weight loss through behavior modification every Tuesday at lunch and dinner times, a one time weight reduction diet class every Thursday morning, a diabetic diet class twice a month, and a lipid diet class once a week.

Hypertension Classes

A series of three classes for cardiac disease patients and individuals with hypertension and their spouses, held the 1st, 3rd and 4th Fridays of the month. The first class covers the introduction to hypertension, heart disease, and risk determination; the second deals with heart risk factors and risk determination, and the third provides suggestions on living with a low salt, low fat, "prudent" diet.

Quit Smoking Clinic

Eight sessions, given quarterly for interested individuals.

Orientation to the Hospital

A pre-hospitalization orientation visit for children 3-10 years old. This provides an opportunity for children to express concerns, helps them to increase their coping mechanisms and gain understanding of their surgical procedure. A film and doll demonstration are given every Friday.

Exercise/Aerobic Class

Coed physical fitness classes, held twice a week.

Incoming Navigator's Briefing

Orientation on the various health services available at the Mather AFB Hospital, provided to all newly assigned navigator students.

In her October, 1980 report of health education activities, the health educator noted a total of 79 classes, attended by 855 persons. In addition, 145 individual consults in health education were given during the month. Thirty of these were devoted to a cardiac rehabilitation program, in which the individual patient is provided consultation on various topics regarding specific illness, treatment, exercise, diet, and preventive practices. Additional consults were given for the following topics:

Heart attack recovery & rehabilitation
Heart risk factors; staying well
Living with heart failure
Sex and the female heart patient
Sex and the male heart patient
Living with angina pectoris
Prudent diet
Relaxation skills
Understanding and preventing diabetic acidosis
Understanding and preventing insulin reaction
Living with diabetes - not requiring insulin
Living with diabetes - requiring insulin
Skin and foot care for the diabetic
Your gallstone operation
Living with your colostomy
Living with a mastectomy
Tubal ligation
Understanding asthma: description and cause
Understanding asthma: diagnosis and treatment
Vaginal hysterectomy
Abdominal hysterectomy
Vasectomy
Chronic obstructive pulmonary disease - introduction
Understanding peptic ulcer
Living with your colostomy
Smoking and what your doctor wants you to know
C - Section
Quit smoking: ways to do it

Other special activities listed in the October report include:

- o Blood Pressure Measurement Training - Four sessions were given for 28 LPN's and technicians in the Outpatient Clinic and Inpatient Units to improve technique and assure a standard approach to measurement.

- o Quit Smoking Class graduated 15 participants on Oct 15, 80 - of the five active duty participants four were successful in stopping their smoking. All 15 were successful in reducing their consumption by at leat 50 percent.

- o Cardiac Assessment Class was given for ten nurses, including five nursing interns. The assessment included demonstration and guided practice and tapes of normal heart sounds. A class outline and bibliography were turned in for CEU recognition.

Other health education activities that are in the planning stages include: oral cancer screening, breast examination information, and other women's health issues, a healthy heart menu selection program, a children's dental health month, and an immunization awareness program.

There are several innovative health education programs being conducted at Mather AFB. One is the Healthy Heart Program, which offers menu selections that are low in fat and cholesterol with some salt restrictions. The program, which is affiliated with the American Heart Association Multiple Risk Interventional Trials Project at UCD, has gained the cooperation of the Officer's Club, the NCO Club, and the Inflight Kitchen, as well as 18 participating restaurants in the Sacramento area where Mather AFB personnel may eat. (See Attachment 1).

The Weight Control Program provides a step-by-step approach to learning new eating habits that will, in turn, lead to weight loss. The major goal is to produce a permanent change in eating habits that the individual will maintain beyond the program's conclusion. The program is designed to encourage sensible eating habits by employing a system of rewards and penalties. It also involves a written contract, in which the student states the total amount of weight he/she wishes to (lose and is reasonable for losing in four-week cycles. Once the student has achieved his/her target weight goal, then he/she usually immediately enters the second phase of the program.

The second phase consists of one year's weight maintenance in which the client does not come in for regular appointments, but instead comes in only for weigh-in within 48 hours of receiving a telephone call from the Mather Learning Center. Up to 20 call are placed at irregular intervals during this year, so that the client does not know in advance when he/she will report in. The overall purpose of this program is to provide a structure (through the arrangement of certain consequences) which will increase the likelihood of meeting weight loss goals.

The Cardiac Rehabilitation Program is based on the belief that each patient's ability to attain his optimum state of health or well-being is enhanced through the process of education and active participation in his own care. The objectives of this program are to:

- Individually assess and teach each patient, adapting to his needs, diagnosis, and intellectual state, to the maximum degree of his learning ability

- Continuously evaluate the patient by maintaining adequate communication between him, the staff, and the physician, as to the degree of teaching received and comprehended

- Continuously document all patient teaching and responses in the patient's medical records, as a guideline to his learning and comprehension of his diagnosis

The health educator believes that the program provides an emotional uplift for the patients. By starting early with activities that minimally increase cardiac work and prevent deconditioning, the program demonstrates to the patient that the goal of rehabilitation is real, thus counteracting the depression that is often associated with acute myocardial infarction. Vocational rehabilitation also is available while the patient is still in the hospital.

Coordination of activities

The health eductor coordinates inpatient and outpatient education, and may contact community health agencies if and when the health issue is related to the specific interests or expertise of the organizations. For example, the American Heart Association helped coordinate the Health Heart Program; the American Cancer Society provided a mobile unit to the Mather AF dental personnel for the oral screening project; the Sacramento Blood Mobile was used for Mather AFB blood drives; and the American Red Cross provided multimedia first aid and CPR training modules and instructors for base-wide training of the public and base nursery child care personnel. Another cooperative arrangement was established between Mather AFB and the University of California-Davis for the "Mr. Fit" Program - a research project aimed at assessing major and minor risk factors in coronary heart disease. The research findings were shared and recommendations for the "prudent diet" concept emerged. Also, consultation with the American Lung Association yielded several plans for the Quit-Smoking Clinics.

To encourage consumer involvement in the planning and organizing of health education activities, the hospital commander has established a consumer information panel. Members of this committee have been called upon to raise funds for equipment and to help in promotional and public relations activities for new health services, such as the opening of a new child care center on base.

Further consumer involvement in the planning of education activities is derived from questionnaires, given to all health care providers, that ask what patient health education needs exist and in what order they should be addressed. The health education coordinator also writes a weekly news column for the base paper and occasionally contributes an article to the Sacramento public newspaper. She sits on the Sacramento Hypertension Council and is involved in developing educational programming for a new cable TV system. The Council also cooperates in providing blood pressure readings to military personnel located off base. In addition, contact is maintained with various churches, primarily in the Rancho Cordova area, to reach senior citizens for screening programs and blood pressure readings.

Communication with the central office is maintained through phone conversations, monthly reports and workshops. The health educator views the central office as the supplier of "cook book" needs, i.e., lists of what is available, suggestions on how to log experience data, and how to order and document items.

Evaluation of activities

The health education programs are evaluated through monthly reports submitted by the health educator to the Consumer Health Education Division, Brooks AFB Texas. The reports provide information on what programs were used, levels of participation, special activities undertaken, and the results of evaluation.

Major barriers

The health educator lists as major obstacles to planning and implementing health education activities the lack of space, the lack of specific regulations or guidelines for HEC activities (which account for 60 percent of her time), the lack of personnel to assist in implementing the health education activities (currently three RNs volunteer their time on certain days of the week), and the lack of sufficient funds to do what is needed.

The Health Educator reports having a budget of $4000, which is spent on books and pamphlets, films, equipment maintenance and her travel to two professional meetings a year. She prepares the budget largely on the basis of what the previous year's expenses were.

Improvisation is the key to dealing with the above mentioned obstacles. The space problem has been solved by installing two student learning stations, each of which will seat two couples. The increase in publications' expense over the past several years has led to consideration of recycling materials, rather then giving them away. In other cases, it may be less expensive to produce handouts on base than to order them from outside. All staff are encouraged to use "freebies", such as educational packets from drug companies, whenever feasible.

U.S. GOVERNMENT PRINTING OFFICE 1981-546-007/8202